Remarks ON THE PRESYSTOLIC MURMUR, FALSELY SO CALLED.

By W. H. DICKINSON, M.D., F.R.C.P.,

PHYSICIAN AND LECTURER ON MEDICINE, ST. GEORGE'S HOSPITAL; CONSULTING PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN; HONORARY FELLOW OF CAIUS COLLEGE, CAMBRIDGE.

(*Concluded from p. 653.*)

If, then, what is commonly held to be a mitral obstructive murmur is not one, is there no such thing? If such a thing there be, it has been of late neglected, pushed from its stool by the "presystolic" murmur, which I have ventured to regard as falsely so called and erroneously interpreted as regards the direction of the blood. The auricular contraction and the obstructive mitral murmur (if there be one) must be simultaneous with the expansion of the ventricle. The ventricular systole is succeeded by a period during which this chamber remains closed and still; this by expansion of the ventricle and auricular contraction. The position of the second sound is important as marking time. This succeeds the first after an exceedingly brief space. The sigmoid valves are closed by the elasticity of the aorta almost directly the active contraction of the ventricle is over. But not yet does the blood begin to pass from auricle to ventricle. There is the period during which the ventricle waits empty and still. Not until it reopens can the blood enter from the auricle, or any murmur arise which belongs to this act. The murmur of mitral obstruction must therefore succeed the second sound with an interval. And it is obvious that there must be another interval between this murmur (if it exist) and the ensuing first sound, or any sound which is produced by ventricular contraction. The machinery has to be reversed, the dilatation of the ventricle has to be replaced by contraction, the muscle has to harden and pull itself together and stop the influx before it can get way on the departing blood. Thus between the auricular discharge and effective ventricular effort a certain time must elapse and a halt or break occur. The mitral obstructive or auricular systolic murmur must needs therefore begin after the second sound and end before the first, not "running into it," but distinctly separated from it. Such a murmur must be feeble, as is the auricular contraction, and it may well be, considering the want of *vis a tergo*, that it will be developed only in circumstances especially favourable to it.

Such are precisely the characters, as I have fully satisfied myself, of the true mitral obstructive murmur; and if this be so, cardiac diagnosis has in this matter followed somewhat of a planetary course, returning to the point whence it started some fifty years ago; but it has not come back empty handed, for it has acquired the art of recognising mitral stenosis with practical certainty, though by means of a hypothesis which is open to question. In the year 1839, Hope wrote as follows: "When the mitral valve is considerably contracted, a murmur (best heard in the same situation as the murmur from regurgitation, and distinguishable in the same way from semilunar murmurs) attends the ventricular diastole and second sound. From the weakness, however, of the diastolic current out of the auricle, the murmur is always very feeble, soft like the bellows sound, and usually on a rather lower key than a whispered 'who.' I have found this murmur absent, unless the contraction of the valve was considerable, for the blood had still sufficient room to pass with tranquillity; and I have also found it absent when the contraction was *great*—when, for instance, the aperture admitted one finger only, or merely a quill, provided the current was preternaturally weakened by softening, by extreme dilatation of the heart, or by both. In such cases, however, the mitral disease would not be overlooked, as there is almost invariably a murmur from regurgitation. On the whole this murmur is exceedingly rare, though Laennec and authors in general have supposed quite the contrary from mistaking for it the murmur of aortic regurgitation. I have never known purring tremor to accompany a diastolic mitral murmur, the current being too feeble to produce it."[1]

Latham, in the year 1845, refers to the "mitral diastolic" murmur as indicating an impediment at this orifice, but as "a sort of clinical curiosity not found in practice." Watson, in 1857, recognises this murmur, and also its infrequency. "If the mitral valve be converted, as it often is, from a pliable folding valve into a long and rigid unvarying chink, the blood which passes through it from the auricle to the ventricle, during the diastole, may (though it seldom does) cause a rushing or blowing sound." Thus, the "mitral diastolic" murmur, small and infrequent as it is, was recognised by the older writers; and though of late its place has been usurped by the more obtrusive if less veracious "presystolic," yet the still small voice speaks as formerly, and occasionally finds a listener. Modern writers who accept the current view of the murmur which is called presystolic, yet recognise the old mitral diastolic. Bristowe, in his last edition, gives a diagram of each of these murmurs, both as significant of mitral stenosis. Austin Flint recognises two murmurs of mitral obstruction, the "presystolic" and the "mitral diastolic," the diastolic accompanying the early passive part of the emptying of the auricle, the other the concluding part, characterised by active contraction. Balfour holds similar views in this respect. Thus two murmurs, belonging, according to this belief, to different parts of the same act, may be separated by an appreciable interval; while two murmurs, the presystolic and the systolic, belonging to different acts, and made by the blood going opposite ways, may be inseparably blended together. This does not present itself with an air of probability.

Some of the writers I have quoted are among the greatest in medicine. To descend, I will describe the mitral diastolic or direct mitral murmur as it presents itself to my own ear and understanding. In a case of well-marked mitral stenosis where the characteristic *R-r-r-p* has indicated, as I believe, regurgitation through a constricted and ultimately closing valve, it is not very uncommon for one who looks for it to find in the middle of the cardiac pause a short soft whiff, brief, low, not abrupt either in beginning or ending, sometimes "a sound so fine that nothing lives 'twixt it and silence." This begins after the end of the second sound, and stops before the beginning of the first or of the murmur, which in such a case usually replaces it. If there be what is called a presystolic murmur, there is a distinct interval between its beginning and the end of the murmur which I am trying to describe. This murmur in time of occurrence resembles that of aortic regurgitation, though not exactly, for it does not replace or inseparably follow the second sound, but comes after it, usually with an appreciable interval. It is limited to the apex, which the aortic regurgitant murmur, often as it is heard there, seldom is—I must not say never. The direct mitral murmur is much lower in tone than is the aortic; it is not necessarily associated with the jerking pulse, or with what is called capillary pulsation, or with hypertrophy of the left ventricle, all of which are so well known as aortic concomitants. Notwithstanding these differences, there is reason to believe that the mitral direct has often been mistaken for the aortic regurgitant murmur, and possibly *vice versâ*.

To dwell for a moment on the differences and resemblances of the direct or diastolic mitral murmur and that of aortic regurgitation; if that in question be loud, intense, or accompanied with a thrill, it is certainly not a direct mitral. To be audible only at or close to the apex argues for a mitral origin, but not conclusively, since aortic diastolic murmurs are sometimes thus limited. I have endeavoured, but with imperfect success, to make posture a criterion. The aortic regurgitant murmur is commonly exaggerated by the erect position. I have seen cases, in which I have been practically sure that the diastolic murmur was mitral, in which it was audible only when the patient lay down; and it has been likewise observed with regard to the so-called presystolic murmur, which on any view is mitral, that this has sometimes been heard lying, not standing. But, on the other hand, I have found a similar variation with posture in murmurs which I thought to be aortic, though in cases in which mitral disease also existed. Upon this point more evidence is wanted, especially such

[1] Hope on Diseases of the Heart, third edition, p. 367.

as is completed post mortem; but it is not too much to say that the loss of a murmur with the erect and the recovery of it with the recumbent posture is an argument, though not a conclusive one, in favour of its mitral origin. The resemblance of the aortic regurgitant murmur under certain conditions to the direct mitral makes, indeed, the chief difficulty in the sure recognition of the less frequent murmur. This is of the greatest importance, because it so commonly happens that the typical contraction of the mitral valve is the result of endocarditis, which process seldom fails to traverse the small space from the base of the mitral valve to the base of the aortic, and cause some, though generally slight, thickening of the latter. Thus the aortic diastolic murmur is apt to present itself in cases of mitral stenosis, as also is the mitral diastolic. Often, perhaps generally, the distinction can be confidently made; sometimes it remains in doubt. The interval which usually separates the mitral diastolic murmur from the second sound is an important indication, as also is the aortic pulse.

A word may be added concerning the thrill which so often accompanies the so-called presystolic murmur. I believe, with Hope, that the current from the auricle to the ventricle is seldom, if ever, strong enough to give a thrill along with the direct mitral murmur. If a thrill accompanies a mitral murmur, I should regard this as a proof that the murmur is due to the action of the ventricle, and is truly systolic and regurgitant. A thrill may of course accompany an aortic murmur; it is common with the regurgitant aortic: but this is outside my present contention.

I will now relate three cases, one of which might have done duty in the earlier part of this paper, as presenting instances of the direct mitral or true auricular systolic murmur. The first two displayed this murmur in connexion with the common mitral regurgitant, the last with the so-called presystolic. In all there was extreme contraction of the mitral orifice. I would draw attention to the fact that the only case in which the murmur was what is called presystolic was likewise the only one in which, as seen after death, the valve could have been judged capable of closure.

Richard B——, aged fifty-one, was admitted on March 23rd, 1887. He had dropsy, enlargement of the liver, and the general symptoms of mitral disease. The præcordial dulness was increased in extent, the apex beat diffused, its greatest intensity in the fifth space slightly internal to the nipple line. At the apex were two murmurs, an ordinary systolic and a post-diastolic, the latter following the second sound after a short but appreciable interval. This murmur, like the other, was audible only at the apex; it was soft and ended gradually. The second sound, as heard at the base, was rather sharp, free from murmur. Over the ensiform cartilage was a second systolic murmur, which was interpreted as tricuspid. We had, therefore, murmurs which were significant of both mitral and tricuspid regurgitation, without the speciality which would suggest for either the term presystolic, together with the murmur which followed the second sound, and which I, in common with some of the older writers, believe to be the only true auricular systolic. During what remained of life the heart was made the subject of frequent observation. Occasionally the action was so irregular, with repeated short sounds mixed with murmurs, that it was impossible to assign any order to them; when the murmurs could be placed, they were always as described. The first murmur appeared to occupy the early part of the systole, though not ending with the abruptness characteristic of the so-called presystolic. The second left apex murmur which I have called post-diastolic (it should more properly be called *diastolic*, for it occurred in the diastole, though after the diastolic sound), always exceedingly soft and faint, was sometimes indistinguishable. The second sound also became weaker, and at times could be heard only over the lower part of the heart, below the nipple. The associated sounds and murmurs were best made out with a two-ended stethoscope, which brought the central part of the heart and the apex into hearing at the same time.

After increasing dropsy and hæmoptysis the patient died on June 15th. The heart was generally of large size. The left ventricle was dilated and hypertrophied, the columnæ carneæ much so. The right ventricle was dilated and much hypertrophied. The left auricle was thickened, the right dilated. The heart weighed twenty ounces. The mitral orifice was narrowed so as to admit only one finger. From the auricle the hole presented a crescentic shape about an inch and a quarter long, and half an inch at its widest. Its margin was here studded with rough lumps of stony atheroma. Towards the ventricle the valve narrowed; the curtains were greatly thickened with fibroid tissue, and adherent together at their edges, so as to make an irregular funnel shape, presenting below a much smaller opening than above. The flaps were not obviously shortened, and closure could be brought about, except at one corner, where a nodule of stony atheroma as large as a nut prevented their apposition and maintained a small opening while the rest of the valve was shut. The tricuspid valve was not altered otherwise than by dilatation. The opening admitted five fingers. The aortic valves were slightly thickened, but serviceable; they could not have allowed of regurgitation. The pulmonary valves were natural. It was sufficiently clear that there must have taken place both aortic and tricuspid regurgitation, while the narrowing and the roughnesses which beset the channel were such as to confirm the view taken during life that the diastolic apex murmur was one of mitral obstruction.

Rebecca A——, aged forty-one, was admitted on May 18th, 1887, with the general symptoms of mitral disease, dropsy, bronchitis, and flatulence. The heart was apparently dilated, especially the right side. No murmur was as yet audible. The impulse was to the right of its proper position, the sounds quick, as with a contracted mitral valve, which lesion was suspected, notwithstanding the absence of murmur. Under treatment, chiefly small doses of digitalis, the heart became slower and steadier. On June 2nd two murmurs became audible at the apex. The first was a very low, barely distinguishable bellows sound, which accompanied the systole, went all through it, ended softly, and had the well-known character which belongs to the mitral systolic as distinguished from what is called the presystolic murmur. The second was post-diastolic, to use the word in the familiar sense of after the diastolic sound. A short, low, but distinct murmur followed this sound after an appreciable interval. The murmur was followed by another interval, which separated it from the systolic murmur, about to recommence. The second was regarded as the auricular systolic murmur of mitral stenosis. The sounds and murmurs were therefore placed thus: systolic murmur, second sound, interval, final murmur, final interval.

On June 21st the patient died. The condition of the heart was as follows: There was a great amount of fibroid thickening about the mitral valve, the orifice of which was reduced so as to admit only one finger. From the auricular aspect the slit presented a serrated edge, which seemed well calculated to engender a murmur. The flaps of the valve, of which the free edges were about an eighth of an inch thick, were so massive and rigid that they could not be got to close with any accuracy, so that regurgitation must have taken place, and, as it seemed, continued through the whole systole. The tricuspid valve was affected similarly to the mitral, but to nothing like the same extent. The aortic valves displayed one or two small beads of recent lymph on their ventricular aspect, which could not have interfered with their closure. Had a murmur resulted from these minute vegetations, which did not seem probable, it must have been obstructive. The pulmonary valves were natural. The left ventricle was dilated; the right dilated and hypertrophied. The left auricle was dilated and hypertrophied. The heart weighed fourteen ounces.

Charles R——, aged thirty-five, was on April 16th, 1886, referred to my care by my colleague, Dr. Wadham, as having a well-marked murmur of the kind known as "presystolic." This was perfectly characteristic: a short intense murmur at the apex was abruptly terminated by a shortened sharp first sound, this being succeeded by an ordinary second sound; the apex beat was very feeble, and scarcely sufficed to move the spring and lever which I made use of to mark the beginning of the cardiac impulse, but after several attempts I satisfied myself that the lever moved with the beginning of the murmur. The patient now left the hospital. He came in again under Dr. Cavafy, and was by him transferred to me. From February, 1887, until the following April, when he died, he remained under my care. It is not my present purpose to deal with the symptoms, but I may say, in brief, that he had increasing general dropsy, hæmoptysis, and finally incipient gangrene of the left foot. The sounds of the heart varied within certain limits. The action was often irregular. The so-called presystolic murmur was often present as described; latterly it was often so feeble as to be nearly indistinguishable, sometimes entirely absent. In addition to this, there was occasionally audible, but generally not, a short, low blowing murmur. A puff or whiff, which pre-

sented itself about the apex, was not to be heard elsewhere, and immediately followed the second sound, which itself was unaltered.

After death the mitral valve was found to be greatly thickened and narrowed by tough fibroid material, in which calcareous matter was embedded. The flaps were not obviously shortened, but they were adherent together laterally so as to form a nearly rigid irregular funnel, with so small an orifice towards the ventricle that it would not admit without force anything larger than the blade of a penknife. Towards the auricle, which was dilated and thickened, the opening presented a crescentic shape, the curved slit being about one inch in length and a tenth of an inch at its widest. From this, as its greatest opening, the channel narrowed to its smallest calibre at the ventricular exit. The auriculo-ventricular hindrance must have been extreme; it was, indeed, difficult to understand how the circulation could have been carried on. The valve flaps could be brought together by lateral pressure, though owing to their rigidity the closure must have been tardy and preceded by regurgitation. The left ventricle was of small size. The aortic valves were slightly thickened towards their bases, but were clearly efficient so as not to allow of regurgitation. The heart weighed thirteen ounces.

This case appears to have been one of double mitral murmur. As to the first, which was most characteristic of the so-called presystolic, I think it has been sufficiently shown that it was actually systolic with the modification upon which I have dwelt. The second or diastolic murmur, but seldom and feebly heard, was, I think, the true direct mitral or that of the auricular systole. The only point especially to note is that this murmur followed the second sound, without the interval which was noted in other cases, and to which I have attached importance. But notwithstanding this element of doubt, I think that, taking all the circumstances together, the murmur must be accepted as mitral rather than aortic.

In conclusion, I must recur to the meaning of the word "systole" as contraction, not sound. In this sense, I think, I have shown that the murmur is with the systole, not before it. If anyone is pleased still to call the murmur presystolic, let him do so, so long as he makes it clear to all that he speaks, not of the systole, but of the systolic sound. But if my contention be just, it will be best to avoid a term the use of which must involve an error either in observation or language. The point of practical importance which I submit is that the murmur does not belong to the systole of the auricle, but to that of the ventricle, and is therefore that of mitral regurgitation. The difference between this murmur and that of mitral regurgitation, as universally accepted, is chiefly in the modified first sound by which it is concluded, and the evidence thus afforded of the closure of the valve. It may be accepted as a general truth that a diseased mitral valve does not shut unless the orifice is narrowed; thus the so-called presystolic murmur becomes a sign of stenosis. For this great landmark of cardiac diagnosis we have to thank Dr. Gairdner. Our estimation of its value will not be lessened by any difference of opinion as to the precise origin of the morbid melody which we can so readily recognise, and from which we learn so much. Finally, I have endeavoured to rehabilitate the old mitral diastolic murmur, and restore it to its proper station as that of mitral obstruction and the auricular systole.

If the term presystolic is inappropriate, how is this murmur to be designated? We must call it something to distinguish it from the other regurgitant mitral murmur, the old-fashioned one, which continues through the whole systole and implies a valve that is always open. The "presystolic" might become "early systolic" in regard to its position in the systole, or the "stopped systole" in reference to its abrupt termination; while the other might be spoken of as the "full systolic," being unabbreviated and occupying the whole act. The feeble and infrequent murmur of mitral obstruction, the true auriculo-systolic, may keep its old titles, "direct mitral" and "diastolic mitral."

At the Berlin meat examination station during the month of August there were examined 7945 calves, 11,788 sheep, 7216 pigs, and 8265 quarters of beef. Of these, there were condemned 17 pigs (including one from trichinæ) 8 from measles, and 4 from tuberculosis; also 3 calves and 9 sheep; 24 of the beef quarters, 8 of which were affected with tuberculosis, and 8 from jaundice; 62 lungs and livers were also condemned.

Introductory Address

DELIVERED AT

WESTMINSTER HOSPITAL

At the Opening of the Winter Session, 1887–88,

BY OCTAVIUS STURGES, M.D. CANTAB.,

PHYSICIAN AND LECTURER ON MEDICINE AT THE HOSPITAL.

GENTLEMEN,—When it was put to me that I should give the introductory lecture of this year, there seemed many and sufficient reasons for declining that honour. But amongst those reasons there certainly was not the want of a subject. I have always thought that the simple and obvious purpose of an introductory address is to introduce the student to his work. Its spirit should be that of which Mr. Black gave us example last year in words of cordial welcome and honest counsel which come so naturally from his lips. But there are some special reasons which this year bid us diverge somewhat from the beaten track. We are on the eve of grave changes in medical education. Whoever stands at this table next year will have to speak of measures by that time irrevocable, but which to-day have not passed beyond the stage of discussion. And the points at issue are so complicated, the interests concerned are so various, the conduct of the profession is so uncertain, that anyone occupying this place may fairly ask of his audience consideration and allowance in approaching a very difficult, but still a necessary, task.

Now, if I may be suffered to make a plunge where it is difficult to know how best to begin, I would class our present needs or defects in respect of medical education under two heads: one refers to the official tests of knowledge—the examinations; the other to the diploma or degree to be got in exchange for the knowledge so tested. The first want is a common standard of examination, and it is exemplified by the existence at present of some nineteen separate examining bodies. The second want is some appropriate designation or title for medical men which shall do away with the present invidious and misleading distinctions; and *it* is exemplified by the fact that there are now under consideration three, if not four, rival petitions, all designed to make London degrees more accessible.

As regards the first point—the examination standard. Has it ever occurred to you that a professional examination is no sublime or exalted institution? It is rather of the nature of a contract to which there are two parties. Each side makes conditions and gives guarantees. The examining body is responsible for the quality and completeness of its tests and for the public repute of its diploma. The candidate, for his part, attends lectures, produces certificates, and pays fees. It is a contract. But, unlike most instruments of that kind, the contracting parties are not equally watchful against infringement of the original terms. Penalty falls always on one side—the side of the candidate. As for the examiners, they may depart from the conditions by ever so much, and there is no one to call them to account. Thus they may exact too much, so that the candidate gets unfairly rejected; or too little, so that he passes unworthily. In either case the party examined is defrauded, yet without remedy. For if unjustly rejected, the complaint of the plucked is but lightly regarded, as being tinged with prejudice; and if too easily approved (although the wrong done to the student is not less than in the other case), it is not in human nature to criticise too severely the terms or the justice of one's own success. Yet, if you rightly think of it, is it not obvious that a strict observance of the terms of this implied contract is for the interest of both parties to it, and especially for the interest of the student? You seek to bring your goods—i.e., your professional knowledge—to the best market, where their quality will be appreciated and full value given in exchange. If the market tariff is uncertain, or the opportunity is denied you of making full display of your wares, or the price given for them is in a depreciated or obsolete currency, in any such case you strike a bad bargain, and are more or less wronged and defrauded. In plain words, if an examination is of no fixed standard, or the examiners are ill-skilled in eliciting or testing knowledge, or the reputa-

tion of the diploma is equivocal, the detriment is mainly yours. It is to prevent these bad bargains and to protect the purchaser that we have been long seeking (and hitherto in vain) to fix one standard of professional examination, and to exact a rigid compliance with that standard on the part of all the examining bodies alike. That is the main point. It is not all. There is still a higher education, both technical and general, and unhappily it is not within reach of everyone. As with our university degrees, this extra training must be reckoned by way of honour. It cannot be demanded as of necessity. Remember, too, that there is no order of merit whatever that examining boards can confer which can, or which ought to determine for good and all any man's place in the battle of life. Examination does not make up the whole of life, though it may seem to some of you that it spoils the best part of it. But the time comes when you are no longer tested by book knowledge, but by your ability in applying it. We must not leave that out of account. The main qualification for practice is that which practice itself brings to crucial test; and it may modify or even reverse the judgment of the schools.

I am speaking now of *technical* knowledge, and in terms that would not apply to education generally. Such adequate medical capacity as is needed for the whole community must seek its practitioners among many classes and be found in combination, now with more now with less of general culture. That is inevitable. The day is coming, we hope, when the higher education shall reach all classes alike. It has not come yet; and nothing is gained by pretending that it has. But although we cannot at present insist upon one uniform standard of general education, we can, as I believe, so insist as regards medical qualification, maintaining for all such high level of competence as shall be quite safe from depreciation or disparagement or any stigma of inferiority.

Yet some would have it otherwise. I have heard it argued in high quarters that the needs of the public, rich and poor, can never be fully met unless we make provision for an inferior order of practitioners—to be supplied, as is more than hinted, from the Apothecaries' Hall,—whose business it shall be to attend the needy, and stand between them and the wholly unqualified vendor of drugs. The proposal is a bold and a striking one. It is likely to be met without any special effort on our part. Inferior practitioners are never likely to fail us; we need hardly adopt the name as a professional title, or start in life with deliberate intent to qualify for that position. It needs no competition to reach the bottom, and no one is "ambitious of dishonour or an actual candidate for disgrace."

But what I would ask you to recognise is the utter futility and the public risk of all attempts to range doctors or diseases into classes of better and worse. It may be asked, "How else than by the agency of practitioners of an inferior sort can you reach the remoter parts of England, and bring medical aid to the distant and scattered homes of the poorest of the people? There is a simple answer: an inferior practitioner can mean nothing else than one who is ill-taught in professional respects. As such he is a source of danger, and not of safety. He not only discredits his calling, but hurts the public. I fully admit the alternative and know of the many evils of what is called "counter practice" by druggists. But "counter practice," bad as it is, is not half so bad as the blind treatment of an ill-trained, yet legally qualified, practitioner. And for this reason: "Counter practice," having no legal sanction or security, is cautious on its own behalf. The practising druggist is ignorant, but safe. He has no cloak for his ignorance, and no friends when in trouble. He works, so far as he knows, with our implements, and when danger threatens he ceases to work at all. But the ill-taught practitioner needs no such caution, and, to do him justice, he uses none. His diploma protects him, and his worst errors escape exposure by the operation of that complex code of medical ethics which shields every registered practitioner from the censure of his neighbours. But it is said, "Let us at least utilise such ability as we find." Let the less instructed practitioner have charge of the simple case, while more serious and complicated illness falls to the more learned. What, then, I pray you, *is* simple and what complex in disease? There is disease in the making, and disease ready made; that which you meet most in the out-patient room, and that which you meet most in the wards; and which is the more difficult? The fact is, that if any such division of labour as is here proposed were possible (which it is not), it would be the precise reverse of what the people suppose. Advanced disease shows itself, for the most part, by obvious signs easy to recognise. But the earlier stages of disease—disease at its curable time—is habitually obscure. And if medical skill were to be apportioned at all, it is not for the hopeless end, but for its early threatening, that we should want the best of it.

Now what I am pleading for by these arguments, this one professional examination, equal for all, and embracing all the licensing bodies everywhere, is just what this jubilee year is bringing us. It comes, indeed, not precisely in the way that was expected. It seemed at one time—or it seemed to some—that the "Conjoint Scheme" of the two Colleges would beat down all rivalry and become the great central examining body. For good or ill it has not so turned out. The Society of Apothecaries still survives, and still examines; for my part, I can see no reason why it should examine less well than the Colleges; at any rate, all those who looked to see the higher life of that trading corporation squeezed out of it must now reconcile themselves to a competition which the Apothecaries have it in their power to make both real and sharp. More than that, we must abandon, now and for ever, all hope that the licensing bodies of the United Kingdom will be reduced either in number or in the spirit of rivalry. Still, unless appearances are deceptive, the practice of one examining board underselling another, the spectacle of students going up and down the country in search of cheap and easy professional decorations, all this is under sentence of doom. And its destroyer is none other than the General Medical Council!

I am not confident that the mere name "General Medical Council" excites enthusiasm. I am not even sure that its precise function or use is known to everyone. Its debates are lengthy, and their cost (as Dr. Quain lately announced) is twenty-two shillings a minute. But besides its debates, it publishes annually a "Register"—a remarkable volume which, judging from my own case and that of others, represents the world as it stood in 1870. Of all official guides I suppose it is the least accurate. And, in fact, it partly lives on its own errors; for instead of being grateful for correction (like other Directories), it will put nothing right under a fee of five shillings. It only fails to mislead because no one ever thinks of consulting it. Nevertheless, this same Medical Council, chiefly known to us at present by its unsuccessful authorship and its enormous cost, has taken a step in the interest of medical education and examination, the importance of which it is really impossible to exaggerate. In our country revolutions are accomplished silently, and it may be that the recent appointment by the Medical Council of visitors or inspectors of examinations throughout the United Kingdom has escaped the notice of some of you. Yet, in our present circumstances, how better can we secure equal and sufficient professional examination than by the appointment of eminent men who, by periodic inspection and comparison, shall spy out whatever is defective in the quality or in the conduct of examining boards? *Quis custodiet ipsos custodes?* Who is there to examine the examiners? That question is now answered, and, with this new rule of inspection, examiners may be found wanting as well as candidates, and they will have to satisfy their own supervisors. Will they all get through? Have all the quality for eliciting knowledge, the patience to wait for halting answers, the forbearance that gives courage to the diffident? We shall see. Under the new order there may be rejections on both sides of the table. Altogether the bare contemplation of what is awaiting these new inspectors in their efforts to make all examinations fair, equal, and adequate, must crave our utmost sympathy and goodwill. We shall at the same time be properly curious for the first report of these officers, and, for reasons which the Medical Council will understand, extremely anxious that this great task of inspection to which it is committed should prove a reality. It would be affectation to pretend that the Council so far has greatly impressed the profession or the public. It has no great reputation to maintain; it has a stronger incentive—a reputation to make. All who have the best interests of medicine at heart—all of us here to-day—will watch its conduct of this matter with the deepest interest, if not altogether without anxiety.

And so peradventure it may fall to some of us, after these many years of waiting, to see this educational want supplied and a common standard of professional examination meted out to all. But what of the other want? Shall we ever obtain a suitable official title for professional use; ever be rid of these eternal disputes

about doctors and misters? I know full well that I am here treading upon delicate ground. It is easy enough to put forth general principles; it is far less easy to apply them. A number of persons starting from the same premisses will reach the most various conclusions; and the strange thing is that, even with much pains, it is often impossible to put the finger upon the precise place where the divergence begins. In what little I have to say upon the great M.D. question I shall not forget that by prescribed custom I have it all my own way for the moment. I shall not take your silence for consent, nor do I assume that there is but one way of stating the case. Yet there is one thing that may perhaps be taken for granted. We are all anxious to be M.D.'s; and the reason for that anxiety is that the public, even the educated public, owing to old associations and a natural reluctance to break with the past, are enamoured of that title, and believe, in a general sort of way, that a medical degree implies and guarantees superior knowledge. And from this position no argument can drive them. The actual facts have been explained repeatedly, but altogether in vain. They take our medicines, and much else at our hands, with a blind and touching confidence, but upon this one point they have so far insisted. That being so, what has been our own conduct—what is it now? Our present efforts are directed, no longer to removing, but to accommodating a false belief; accommodating it by some method or other which shall confer the Doctorate upon a more extensive scale than heretofore. It is very necessary, as I maintain, that this precise position of ours in reference to the title of Doctor should be kept in view. Much hinges on it. We might have dealt with the matter and with the public after a different and more direct fashion. This respect for a particular title is no worse than an anachronism. Doctors *were* learned men once. We might have had larger hope in time, waiting for a little, while the community at its leisure parted with the old beliefs and consented to surrender the obsolete. We might even by public pronouncement have protested against a delusion. We did none of these things. On the contrary, noting the mind of our clients, we are now about, not indeed to step over to their faith—it is not a faith,—but to yield to their prejudice and feed the idol of their superstition. It may be a good thing to do, and a politic, or it may be neither of these. Good or bad, it is what we are now about. And it is an indirect road to the desired object, which is certain to have perils of its own.

But someone will say, "Let the actual virtue of the symbols M.D. be what it may, the desire of London students to obtain a degree of their own, on terms similar to those which procure graduation at Glasgow or Durham, is perfectly legitimate, and ought to have been satisfied long ago. What is this pedantry that would stand in the way of our obtaining here in London, at the hands of the Royal Colleges, the very same decoration which, but for an accident, would have been procurable from a real London University?" Such language is reasonable enough, and I suppose there is no doubt whatever in the mind of anyone who has followed the discussions upon the subject that the want complained of—the want of a University—will be supplied. The question is, How? and I fear only too much in the breasts of some ardent spirits the question is, How soon?

It would be to little purpose now to relate by what accident, or series of accidents, it comes about that our vast city has no university of its own properly so-called. This Jubilee year fitly recalls the advance of medicine in many departments; most of all, I think, in that enlargement of its scope which places the public health, material and moral, among the concerns of the physician, making the progress of medicine all one with the welfare of the world. But for medical education the retrospect is less cheerful. University College to this day bears witness, by its name and the form of its government, to an abortive scheme which fell through on the very verge of accomplishment fifty years ago. And now, misled by a name, and in the belief that the examining institution in Burlington Gardens is in reality a university, the common saying is that what we Londoners want is a second university. "Why," it is said, "should a city more peopled than Scotland, of such vast treasure and resources, be content with a single university?" We are not content; and we have no university.

But while London has lagged far behind every city that respects itself, it is shaking off its lethargy, and the grand idea is beginning to take shape of a university so full and complete in all the requirements of modern science that the very thought of it is bewildering. And for years past, by its material development in art and science schools and museums, London has been preparing itself for incorporation as a great centre of intellectual training. Nor does it want for traditions not less venerable than those that enshrine the old universities. Tramping about London, I am often reminded that we have here, not our own merely, but the heritage of all the world. Old London, alas, is rapidly melting away. But there is hardly a street of it that does not recall memories that will never die. Take your way from the City to Westminster, and you leave Shakspeare at the "Mermaid" and Milton in Aldersgate; and, coming down Fleet-street into Covent Garden, you pass the lodgings of Goldsmith and of Johnson, the coffee-house of Dryden and Addison, the death chamber of Spenser, and the grave of the author of "Hudibras;" and so, by a barber's shop that saw the birth of Turner, greatest painter of the modern world, into Leicester-square, where, until late years, you had at a view Sir Joshua's studio, Isaac Newton's watch tower, and the workshop of our own John Hunter. There is no department of science, there is no school of art or of literature, there is hardly an invention or a discovery that has not had London for its home, if not for its birthplace.

All this, you may say, is fine talking; but we cannot build out of shadows or found a university of the dead. Such a work must take time, and we have no time to spare. There are corporations to be consulted; vested interests to be dealt with; conflicting claims to be adjusted. And, even when these are appeased, there is the University of London—the man in possession—to be considered. Your grand modern university is nothing but a dream. And so many of us have come to the conclusion that if we are to get help at all we must help ourselves. We have already a conjoint examination of the two Colleges; we shall have, we mean to have next, a medical degree attached to it. We shall be finished graduates while you are still dreaming.

"Your old men shall dream dreams." Yes; but let me remind you that the same scripture says, "Your young men shall see visions." Whatever our individual wishes may be, whether we favour or not this scheme of the Colleges for a medical degree, to be had on the spot and to be had soon, let us wake to realities and look the matter fairly in the face. Good or bad, the scheme is not unopposed. And the two petitions that are opposed to ours (that of the Teaching University and that of King's and University Colleges) speak with one voice. Listen to the words: "We deprecate any severance of the machinery for granting degrees in London from proper academic influences; any separation of the medical faculty from other faculties in the contemplated University."[1] It has seemed good to those who direct the policy of the Colleges to ignore these expressions of opinion. They have weighty support nevertheless. And, strange to say, among the active supporters of the opposing petitions are many leading members of our profession, who, but for this evidence, might seem by their silence to favour the scheme of their own colleges. It may be that in the end we shall accommodate the matter by mutual concession. It is much to be wished. But it is not as we stand now. The present proposals represent rival schemes. We cannot have all our prayers answered. One will be taken and the others left.

But suppose it done. Suppose that at the end of this year we learn that any candidate who has passed the conjoint examination is at liberty to go up for the degree of the two Colleges. Your first question in such a case will naturally be, What does "going up" mean; what extra subjects in arts or literature does the degree require? As yet there is no answer to that question, and no shadow of an answer. It has been asked repeatedly at the College, with no better result than to awaken those now well-worn chords as to the general excellence of the proposed degree whose music is now so familiar. I say that a large measure of the opposition to the Colleges' scheme is due to a wholesome fear lest this new degree should be conferred for professional attainment alone; that it should be used as a mere professional badge; and that thereby, however unwittingly, the position of medicine among the learned professions should be lowered.

But next comes this further consideration. You establish your new degree, and you set it down by the side of the existing M.D. of London. In so doing you must inevitably

[1] See Petition, Teaching University, p. 5; ditto, King's and University Colleges, p. 7.

invite comparison; and if that comparison is unfavourable to the Colleges' degree, is it not possible that even our master, the public, shall note the difference and signify it by some epithet of inferiority? Other Doctorates of other universities are what they are. There is the degree of this city and of that, each with its own reputation; but the degree you now propose is a degree for London. Its rank is determined by its locality; it is settled beforehand, and you can neither exalt nor degrade it. "People," it is said—and most truly it is the source of half our troubles—"people do not go behind names." But here, with two London degrees side by side, they *must* go behind. Rival practitioners will invite them behind. And if, upon this inspection, they find the one title demonstrably inferior to the other, your whole plan fails, and the similarity of title goes very near to suggest what lawyers call "a colourable imitation." Such dangers and difficulties can only be overcome by making the two degrees equal—equal, that is to say, from the point of view of the public, and regarded as professional tests. It is often complained that the Preliminary Scientific Examination of the present London medical graduates is unduly severe, and that thus the door is shut upon candidates who would gladly accept and be easily able to satisfy the later requirements of the degree. But where is the Council or the Government that would consent to a double set of medical degrees in London on the ground that one of the two made its own entrance too narrow? That would obviously be a case for reconstruction, not new creation. No. We must base our demands upon one of two grounds: either, first, that we desire a degree for London which shall be more accessible all round—that is to say cheaper than the present degree; or, secondly, that we desire not merely the form of a university degree, but the substance of a real university training. In the one case, the very terms of your demand are fatal to the repute of the new degree; in the other, it is not the scheme of the Colleges that you favour, but that of the proposed Teaching University.

And when the matter is fairly faced, I do not know that those who favour the creation of a real University of London as the best solution of the difficulty, impressed as they are with the unequalled resources of the metropolis and the unequalled benefit of that college comradeship which is the special ornament of our higher national training—I do not know that these have any reason for despair. Ours is a conservative country. Our university system is old, yet vigorous. It is an integral part of our social life, and must grow and develop along with it. It was never, in our long history, so active, so wide-reaching, or so popular as at the present moment. It is true that this new degree, at present undefined, is much belauded beforehand. It has all the perfections of the unborn (like the offspring of old maids and bachelors), yet it certainly involves an anomaly, its future status is at the best precarious, and it is not easy to deny that its main design is to meet and overcome a prejudice, and, indeed, a misconception on the part of the public. At any rate, let us know where we are. We are at least entitled to ask that this scheme of the Colleges should be presented in its entirety, and that its precise intention, as regards those branches of education which are not purely technical, should be plainly declared. Is it proposed that these new graduates, provided they show themselves well instructed as medical men, shall thereupon be deemed eligible without regard to the higher education? Or if that is *not* intended, then (inasmuch as the two corporations concerned have no art or literature departments of their own, as universities have), give us some express assurance—not by mere rhetoric or rhapsody (we have had more than enough of that)—tell us in precise phrase how much or how little of that general knowledge which just now goes by the objectionable name of "culture," how much of literature and of reading, it is proposed to include in the new qualification. And indeed, without being captious, we might go further and ask by what external aid the Colleges propose to conduct their examinations in art and literature, subjects outside their own scope. For if that be not provided for, we may be in danger of making the confusion worse rather than better, and adding to a university that does not teach a second that cannot examine.

I have detained you too long and hasten to conclude. It seems strange, indeed, that a profession like ours (which in respect of producing names has no parallel for fecundity) should be baffled by a question which is mainly nominal. Let us take courage from what we have, and be circumspect in our search for more. The joint diploma of the two greatest medical corporations of Great Britain, name it as you will, must have its own value, and may be trusted to stand alone for a little while without meretricious adornment. As for the degree that is one day to supplement it, it will not come the quicker for our present disputes, or the sanguine expectations of those who assert that it is already at the door. With or without our help, a teaching, that is a real London University is at hand, and, as I firmly believe, our own interests lie not in opposition, but in cordial co-operation with those who are now labouring to promote it. Whatever the issue, and with all our differences, there is but one purpose inspiring us—the progress and the honour of a great profession.

One word in conclusion, which shall be addressed to those new comers to whom the details that have occupied us may seem wearisome, and who thought to hear some higher discourse. But, in fact, these matters concern you nearly. For when, according to the common lot, you come to appear at the examination tables of your country, the questions which now vex us will have reached some wise and definite settlement. "The mills of the Lord grind slow; but they grind exceeding small." Your time of preparation will be also the time when the tests to be applied are being made fair, equal, and sufficient; and your examination reward will be of that form which is finally decided to be the best.

Introductory Lecture

DELIVERED AT

ST. MARY'S HOSPITAL

At the Opening of the Winter Session, 1887–88,

BY ANDERSON CRITCHETT, M.A. CANTAB.,

OPHTHALMIC SURGEON TO, AND LECTURER ON OPHTHALMIC SURGERY AT, ST. MARY'S HOSPITAL.

GENTLEMEN,—Had Dante written in the nineteenth century, his magic pen might have done justice to the sufferings of those unfortunate members of our profession who, possibly by way of atonement for errors in diagnosis and faults in treatment, are condemned to pass their short vacation in a vain endeavour to infuse some interest and originality into an introductory lecture. I readily acknowledge, however, that for my own poor part, although for some weeks past I have languished under this cloud of work, it has not been without a silver lining, for I am enabled on my own behalf and on that of my colleagues to offer a cordial and hearty welcome at the opening of our winter session alike to those who have already borne with us the heat and burden of the day and to the new recruits who now join our ranks for the first time. I know that I rightly interpret the feelings of the staff when I express an earnest hope that you will always regard us as your sincere friends, for, believe me, we are actuated by a single desire to promote your welfare and happiness. In return we ask, and I believe we shall not ask in vain, for your confidence and your co-operation. There must be none of the innate distrust with which a pupil too often regards his pedagogue, for we are here *all* students, and though some of us have been pursuing the steep path of knowledge for more years than we care to remember, we all have the same goal in view, we are all striving to compass the same end—the relief of human suffering.

It seems hard that those gentlemen who appear amongst us for the first time should at once be lectured, for as yet they have done nothing to deserve such an infliction, and I feel somewhat in the same position as the stern parent who invariably gave his children a sound thrashing before breakfast on the ground that they might possibly need it later on in the day when he would not be there to administer the correction. I cannot, however, too strongly impress upon you the wisdom of adopting a methodical mode of work. Doubtless "distance lends enchantment to the view" as far as the College examinations are concerned, but that student alone can regard their approach with confidence and equanimity who begins to work steadily and with method from the commencement of his career.

Anatomy and physiology should at first occupy your

almost exclusive attention, and your knowledge of these subjects must be sound and practical. Begin by studying the skeleton thoroughly, and be constantly in the dissecting room. Here I would offer a word of advice which may perhaps surprise you—it is this: do not occupy too much time in making elaborate and ornamental dissections. It is, of course, essential that you should acquire manual dexterity and neatness, but I am convinced that the most reliable anatomists are those who relentlessly pursue each muscle and nerve, and investigate each hidden bony cavity, as opposed to others who hesitate to be thorough because they might spoil the appearance of their dissections.

I may, perhaps, shock the feelings of our officers of health by advising you to live as much as possible in an anatomical atmosphere; but I mean by this expression that you should so far allow anatomy and physiology to absorb your attention that they may almost enter into the pores of your skin, and that they should form the chief subject of discussion with your fellow-students, for whose delectation and instruction you should at all times be ready to produce some hidden treasure, such as a carpus or a special cervical vertebra. In the evening you should, by study, not only consolidate the practical knowledge which has been gained during the day, but anticipate the work which lies before you on the morrow, so that, scalpel in hand, you may know what to look for, and where the object of your search is to be found. To those happy beings who have successfully passed the dread ordeal of the first examination, I would offer a few words of friendly warning—"Labuntur anni." In less than three years you must have put on such an armour of knowledge and experience as will enable you to face those terrible opponents—disease and death. Within the walls of hospitals you can witness the daily conflict, and even there, where the weapons of modern science and treatment are wielded by experienced hands, the foe too often gains the victory. But the time is coming when you must each of you and *alone* commence the struggle. The time is coming when the life of a fellow-creature will, humanly speaking, be given into your hands, as

> "When that voice, in feeble moans of sickness and of pain,
> But mocks the anxious ear that strives to catch its sound in vain;"

when the firstborn is in danger, and the mother's eye is turned to you appealingly for help; when the life-blood is flowing fast from the wounded artery, and all depends on your knowledge, precision, and resource. What will be your feelings if at such times you are found wanting because the bitter memory of your student's life shows nothing but a barren record of ill-spent time and wasted opportunities? I cannot, I will not believe that any of those whom I am now addressing will be found in the ranks of the ignorant and the unready. You would prove false to the standard of St. Mary's and its noble past; for as the soldier looks with pride upon the banner that bears the scroll of bygone victories, so we in our turn cherish the names of Alderson, Sibson, White Cooper, Wiltshire, and Meadows—of men who, though their sun has set, still light our pathway with a lingering after-glow of golden memories.

I would once more impress on you the importance of dividing your time into regular intervals of work; but I should also be amongst the first to acknowledge that he will labour most successfully who is ready in due course to relax his mental strings, and promote his physical welfare by healthy and manly recreation. My ideal of a model worker was realised in an old college friend at Cambridge who rowed in the first boat, was the best bowler in our eleven, and came out high enough, amongst the Wranglers, to obtain his Fellowship. You must, I know, accomplish a considerable amount of reading, and become during the long winter evenings slaves of the lamp, but your favourite fields of study should be in the wards, and in the out-patient rooms. There, and there alone, can you gain a sound practical knowledge of medicine and surgery, and I may perhaps be pardoned for the suggestion that you might do worse than devote the scraps of your spare time to the special departments. Later on in your student's career you will become dressers, clinical clerks, and finally, if you are found worthy of high office, house surgeons. In these several posts you will taste the sweets and bitters which pertain to personal responsibility, and I would venture to make a special appeal to you concerning your treatment of the patients who may be placed under your care.

There is a vague impression on the minds of many of the general public that constant familiarity with scenes of suffering begets a callous feeling in members of our profession. I cannot for a moment allow that such is the case; but I earnestly hope you will one and all remember that the accusation of needless cruelty is occasionally, though quite unjustifiably, hurled against us, both in poetry and prose, and it is by deeds, not by words, that we must refute the charge. The divine injunction that we shall "Do unto others as we would they should do unto us" can never be more perfectly carried out than in our treatment of our patients; while the helplessness, and too often hopelessness, of suffering and disease should stir the better feelings of our nature, and stifle harshness with their mute appeal. We should endeavour to combine with a gentle bearing calm judgment and unfaltering decision where prompt action is necessary; there should be the iron gauntlet in the velvet glove. Special care is needed in our treatment of children. A child's confidence is easily won, and a few moments devoted to the accomplishment of that end will not be wasted. Nothing is more touching than a child's implicit faith in our efforts for its relief, or more complete than its gratitude for results achieved.

And now for a few words of counsel as to the best method of utilising the first few years after you have emerged from the condition of student to that of qualified practitioner. There may, of course, be special reasons why some of you must plunge at once into the vortex of practical work; and it is a natural, and I may add a healthy, impulse which makes a young man desire to transfer the burden of expense and responsibility from other shoulders to his own. But I would earnestly advise such of you as have time and opportunity for additional study to pass some of the higher examinations, and, if possible, to acquire a university degree. Believe me, you should thus utilise those few invaluable years when the seed of knowledge is received and germinates in a pure mental soil, and when youthful energy and confidence are as yet unchecked by the cares and responsibilities which must inevitably accompany advancing age. Use, therefore, this priceless time.

> "It will not last for ever,
> Still ebbing from our gaze;
> The waves of life will never
> Bring back those golden days."

I strongly advise you to apply for resident appointments either here at St. Mary's, where, I am glad to say, they are freely open to our students; or, if there be not room for you at home (for with the best desire to do so, we cannot provide in that direction for all our *alumni*), then you must seek "fresh fields and pastures new," at some of our excellent provincial hospitals, where you will find physicians and surgeons from whom you may acquire much valuable knowledge, for the country contains many men who are more than able to hold their own with their metropolitan brethren. After devoting some time in the manner I have indicated, the most serious work of your life will commence. You will now realise more fully that life is real, earnest, and laborious. You will feel that your frail bark has at length quitted its safe anchorage and must sail on unknown seas, where there may be under-currents of jealousy, quicksands of professional rivalry, and sunken rocks of unforeseen disaster and discredit. In spite of prejudice and competition, you must slowly but surely win your way into that hardly-won fortress—the confidence of the public. The struggle will be severe, but let the work be loyally done. Let there be nothing mean or underhand, no attempt to gain credit at the expense of another practitioner, no trafficking with cant or hypocrisy: better to accept an honourable failure than stoop to such miserable expedients, which can but result in complete mental and moral degradation. Remember that material prosperity and wealth are only to be valued as they minister to refinement, to moral and intellectual progress, to the promotion of science, and to the furtherance of that broad and holy charity which elevates mankind. You must be ready to offer upon the altar of public duty that most precious and sacred of all virtues—self-sacrifice. A far abler pen than mine, and one which I may be pardoned for regarding with filial veneration, has thus described the life that is before you:—

"Picture to yourself for a brief moment the life of a medical man in the full tide of his professional career; what a stormy, anxious unrest it is; what exorbitant exactions are made upon his resources; what exaggerated expectations are formed of his powers; what unthinking demands are made upon his vital energies. By day and by night, for rich and for poor, with or without recompense, he must obey the summons of suffering humanity. How many

anxious complicated unfortunate cases he meets—cases where great confidence is placed, where great interests are at stake, where the feelings are strongly enlisted—cases where life may be just quivering in the balance, and one slight error of judgment may snap the slender thread; when every eye is turned in anxious trusting faith and eager hope upon him, and he must sustain their drooping hopes by a fictitious calmness and assume a confidence that his judgment belies, until his over-taxed mind and over-wrought feelings are wellnigh exhausted with the effort. Again, he must be ever ready to encounter accidents, disease, and death in all their most appalling forms; when friends are paralysed with fear, and when contagion carries panic to the stoutest hearts, he must be there calm and unmoved. The blanched mother may be fluttering out her own life at the moment when she has given birth to another, the victims of cholera may present all the hideous features of death whilst yet writhing in vital agony, delirium and tetanus may compress the energies of a life in a few brief racking fatal hours, and still he must be there to gaze on sufferings he cannot relieve, and to feel that science is impotent and humbled in the presence of indomitable death."

Such is the picture painted by one who was himself a member of our profession, and who knew the hardships and anxieties of our toilsome life. Are there any now listening to me who hesitate to enter upon the thorny path that lies before them? I have been told that in the Latin Church each candidate for holy orders is required to pass many days in solemn prayer and solitude before presenting himself for ordination. When at length the fateful day has arrived, and they appear before God's altar, the bishop, after pointing out the nature of the sacrifice which must be made in the complete surrender of personal will, of wealth, and of the many attractions of the world, makes a lengthy pause, during which any who may still doubt the depth and sincerity of their convictions may at the last moment reconsider their position, and retire ere it be too late. In like manner, I would not have you enter lightly or unwarned upon the arduous duties and responsibilities which can never be dissociated from our career. Remember that, as in the case of the priest, the sacrifice must be complete and thorough, and that you must give the whole man for the whole time.

Although we feel a justifiable pride in our hospital, in our growing school, and in the number and character of the recruits who now flock around our banner, we would not willingly enlist one soldier of medicine who will not be true to his colours, or who will falter in the presence of the enemy, for we must present a serried and unflinching phalanx, firmly united by the bonds of mutual confidence and by the knowledge that those who fall will not have died in vain. But before you make your final decision, let me turn to the brighter and more sunny side of the medical landscape. "The old order changeth, yielding place to new," and the onward march of time has brought with it so many beneficial innovations in our method of work, and has made such large additions to our instruments of precision, that we go forth to the fray more fully equipped than were our forefathers; indeed, the advance in medicine and surgery has been proportionately rapid as the importance of physiology and pathology came to be recognised, and the phenomenal growth of these two giants has been of comparatively recent date. The early history of our profession is surrounded by an atmosphere of mist and haze, which not unfrequently accompanies the dawn alike of day and of scientific truth, and our brethren in the middle ages seem to have thought that a cloak of mysticism and necromancy would suffice to cover a multitude of medical sins. According to the chroniclers of the time, a visit to the doctor's cavernous sanctum must have demanded a mixture of courage and confidence to which many modern patients cannot lay claim. The dim light of a taper served to throw the contents of the chamber into unpleasant relief. A large stuffed lizard, apparently an indispensable companion, was suspended from the ceiling, while the walls were artistically decorated with toads, snakes, newts, and other slimy creatures; a large crucible occupied a prominent position, and the sulphurous odours which pervaded the room unpleasantly suggested the possibility of the doctor's having entered into an illicit partnership with the gentleman who lured Faustus to his ruin. We are not told whether as much importance was at that time attached to the possession of a good professional manner as is now the case, but the doctor evidently relied not a little upon the impression which a flowing robe, liberally garnished with cabalistic signs, would create upon the mind of his patient, and he was always ready to call astrology to his aid if he found himself face to face with any unusually tough matter for diagnosis. The remedies used in those days appear to have been extremely powerful, and, if history may be trusted, the drugs that obtained the greatest popularity were strong and reliable poisons, which were by no means devoted by the purchasers to the salvation of human life. The treatment of wounds did not err on the negative side, for the immediate application of boiling oil was considered an infallible specific until the practice received a salutary shock after one of the sanguinary battles. The stock of oil was unequal to the demand for it, and the unhappy surgeon, having no better substitute, treated a portion of his cases with cold water, and was much surprised to find that his new and involuntary remedy left the old one completely in the shade. Simplicity is not the least amongst the virtues. A few more revolutions of the wheel of time bring us to the period of the Barber Surgeons, the sign of whose calling showed that their fame for bleeding spread from pole to pole. Then in the sixteenth century came that pioneer of scientific research, the immortal Harvey, and we are proud in the knowledge that St. Mary's men are numbered amongst the most loyal and constant supporters of the Society which bears his name. Time would fail me were I to mention all those who have left the stamp of their genius upon the seal of their time, but the memory of such men as Sydenham, Cheselden, Jenner, and John Hunter makes us recognise with grateful admiration that "there were giants in those days."

And now we come within measurable distance of our own time, and are able to draw our records from living men. Wonderful indeed are the stories we hear of the capacity for disposing of heavy meals and unlimited port which English stomachs possessed at the commencement of this century, and equally wonderful were the heroic means adopted by our professional brethren to remedy the results of gastronomic indiscretion. Periodic bleeding and cupping, with the administration of strong purgatives, were deemed matter of necessity, and there was a constant supply of that which Ingoldsby has well described as

> "That nasty green fluid they so often send us
> Labelled, 'Haustus cartharticus mane sumendus.'"

It must have been as a mild protest against this system that a patient, when asked by the doctor whether he had followed his prescription, replied, "Certainly not; if I had I should have broken my neck, for I threw it out of the window." It was a matter of certainty that there would be a reaction from such a system, and the recoil took us so far in the opposite direction that I am amongst those who think with our respected friend, Dr. Hare, that we sometimes fail to take advantage of old and valuable remedies because their indiscriminate employment has brought them into deserved discredit.

Now let me turn from the period where I must rely upon the memory of others to that which comes within the circle of my own experience. In how many directions the sappers and miners have been successfully striving to compass the overthrow of suffering and disease, and in regions which had previously been deemed impregnable. I have only to allude to the extraordinary advances made in abdominal surgery, and in the treatment of stone both in the kidney and bladder, and to the brilliant results of ovariotomy with which the honoured name of Sir Spencer Wells must ever be associated, to prove the truth of my assertion. Then, again, even the opponents of Sir Joseph Lister must allow that the introduction of his system has taught us the incalculable advantages which accrue from extreme care, cleanliness, and attention to sanitary laws. The progress in medicine may not have altogether kept pace with the recent rapid strides made in the field of surgery, but the advance has nevertheless been sure and steady, especially in our knowledge of the pathology and treatment of diseases of the nervous system; while the comparatively new discoveries in bacteriology open out an almost illimitable area for researches, and may, I trust, lead to the downfall of many of those terrible diseases which have hitherto baffled their pursuers. We are proud to know that British physicians and surgeons can claim a sufficient share in the advance of science, but we must readily and gratefully acknowledge the heroic self-sacrificing and successful labours of our professional brethren both on the Continent and in America.

And now, before I conclude, I trust that my friendly

audience will pardon me if I stray for a few moments into those Elysian ophthalmic fields where I have passed my happiest days, and which, though small in area by comparison with the vast tracts of surgery and medicine, possess a soil that yields some of the sweetest flowers of human gratitude.

I am old enough to remember the introduction of the ophthalmoscope by that great teacher and thinker, Helmholtz, who, I rejoice to say, yet lives to witness the priceless boon which his discovery has conferred upon the human race. It is difficult for those who are now familiar with its use—and their name, I trust, is legion—to conceive the wondering eagerness with which the original workers sought by the aid of their new weapon to bring to light those numerous hidden diseases of the eye which had till then been only partially and most imperfectly recognised. Many modifications of the instrument have since been introduced, and amongst the most recent and most useful improvements has been the ingenious adaptation of the electric light to the ophthalmoscope by my colleague, Mr. Juler.

Then, again, I remember the introduction of the subconjunctival operation for strabismus with hook and scissors, and the present method of enucleation of the globe, and with each of these operations the name of my honoured father must be associated. In the latter case the improvement on the previous rough and almost brutal method was so marked that the new plan was freely practised, and as there was a rather large stock in hand of eyes which needed removal, our witty friend and colleague, Monsieur Warlomont of Brussels, had perhaps at that time some slight justification for his suggestion that unless an oculist had enucleated at least one eye during the day he could not sleep well at night. About this period the venerated Nestor of English ophthalmic surgery, Sir William Bowman, inaugurated a new mode of dealing with epiphora and obstruction of the lacrymal duct by slitting the canaliculus and passing probes of various sizes; and he has been followed by Weber, Stilling, and other intelligent workers, who have grafted many ingenious additions to the parent stem. In 1856 came the remarkable discovery by our beloved von Graefe that the dread disease glaucoma, which had till then defied all the efforts of ophthalmic surgeons, might be successfully subdued in the greater number of cases by that safe and simple operation, iridectomy. He met the usual fate of great inventors, and encountered in many directions an opposition which was doubtless honest, but by no means unprejudiced; and I cannot but remember with pride that he received most loyal, and, as he gratefully owned, most valuable support from Sir William Bowman and my father, and from the large majority of English ophthalmic surgeons. The fact that iridectomy was too readily assumed to be a universal remedy, and that the iris seemed to act upon the minds of some oculists in the same manner that a red rag does upon a bull, by no means detracts from the merit of von Graefe's brilliant discovery. It has stood the severe test of the experience of thirty years, during which time it has been exposed to the searching rays of professional opinion, and its merits and demerits have been repeatedly and exhaustively canvassed; and although its efficiency in certain forms of chronic glaucoma is doubted by some, all must now admit that it is of inestimable value in the acute and subacute conditions of the disease. To von Graefe also belongs the credit of having introduced an operation for extraction of cataract, which, with certain slight modifications, remains to this hour the most successful and the most generally adopted method.

To our countryman, Mr. Jonathan Hutchinson, we are indebted for the discovery that certain forms of eye disease may be directly traced to hereditary causes.

We must not forget that amongst the numerous improvements in our art which have come from our distinguished *confrère*, Dr. De Wecker, of Paris, we have sclerotomy, the handmaid of iridectomy, being sometimes used as its efficient substitute, and sometimes as its successful supplement. From him also comes the treatment by jequirity in cases of pannus, and the application of the tattoo to dense and disfiguring leucomata. I can but glance briefly at the great progress made in the introduction of peritomy, of inoculation, of improved plastic operations on the eyelids, of evisceration, and of the methods of dealing with conical cornea; but I must not omit to make grateful allusion to that valuable local anæsthetic, cocaine, which, though a boon to all humanity, renders such exceptional service to the ophthalmic surgeon.

At the risk of taxing your patience unduly by dwelling too long upon this special subject, I must remind you of the colossal work achieved by the illustrious Professor Donders, who has opened out a new world for thought and investigation, and has elevated the study of practical optics to the dignity of a science. He has taught us that strabismus, headache, some forms of diplopia, ciliary spasm, and many other evils frequently depend upon some uncorrected error of refraction, and by placing it in our power to give the required relief, he has proved himself one of the greatest benefactors to humanity which the century has known.

You will acknowledge that the record of the last forty years is one upon which the ophthalmic surgeon can look back with mingled feelings of pride and thankfulness; but much remains yet to be done, and I trust that the time is not far distant when the spread of knowledge amongst us will alter those terrible statistics of sight lost in infancy through ignorant or wilful neglect of necessary care and treatment, and will also arouse the instructors of our children to a sense of their duties, and induce them to make that essential provision of light which is now too frequently absent.

You will, I am sure, desire that I should express the great regret which we all feel in losing the valued services of Sir Edward Sieveking, who joined St. Mary's Hospital when it began its struggle for existence, and has remained to see the fertile fruition of his labours. I must also, on your behalf and on my own, allude with grateful pride to the good work which has been accomplished, both for hospital and school, by our Dean, Mr. Field.

For the rest, gentlemen, I would entreat you to be ever mindful of the dignity of your calling. Regard not that calling from a commercial point of view, but rather from the high standpoint of philanthropic science. In manly emulation you may well engage—it is the soul of scientific as of all other enterprise; but, oh, beware those jealous feuds and petty rivalries which degrade a glorious contest to the level of a mean and merely personal competition. Let no sordid, selfish aims ever tempt you into courses derogatory to the true motive and purpose of your pursuits—the alleviation of human suffering. Never forget the saying of a famous surgeon, "Ours is the noblest of professions, but the vilest of trades." A due sense of the honour of your art will make you nicely observant of your own. Nor will you fail to remember that, even in the case of the most gifted student, industry is the indispensable handmaid of success. The mental, as the material, soil needs for the yielding of an abundant harvest careful culture, only to be achieved by thorough hard work and anxious observation. "Pater ipse colendi haud facilem esse viam voluit."

It is given to few members of our profession to achieve undying fame. The artist leaves the record of his genius on the painted canvas, and wondering ages worship at his shrine; the poet lives again in words of song that hang upon the lips of countless generations; and the musician breathes his soul into the enchanting melodies that echo for all time. Such fame is not for you. Yours is the priceless luxury of doing good; and in the gratitude of those whose pains you mitigate, whose sorrows you assuage, there lies a richer and a nobler recompense than "proudest record 'mid the tombs of kings." Be therefore of good heart. Rest assured that the reward which waits on diligence will in the fulness of time fall to your lot. As Hamlet says, "If it be not now, yet it will come: the readiness is all."

THE

VALUE OF SHORTHAND TO THE STUDENT AND TO THE PRACTITIONER OF MEDICINE.[1]

BY W. R. GOWERS, M.D., F.R.S.

AMONG the miscellaneous uses of shorthand, not the least important is its value to the student of every kind. First to the student who learns by listening to oral lectures. Many students take notes of lectures in longhand. The process, however, interferes much with the thorough comprehension of the lecture, and so some students prefer simply to listen, to "take in" all they can, and trust to "reading up" the subject afterwards in books, to supplement their recol-

[1] Read before the International Shorthand Congress.

lection and to learn the details that they fail to remember. Shorthand enables the student to secure the necessary abstract in writing, and at the same time to give almost as much attention to the subject as if he took no notes. But for this he must have a thorough mastery over the art. The temptation to the student who writes shorthand is to take down too much. A *verbatim* or really full report of a single lecture will occupy the whole of the evening in its revision and correction, even if it is not written out; and most students have to hear and master three or four lectures a day. To take a full report is a mistake; a good and terse abstract is what is needed, and, as I say, this can be taken in shorthand without any interference with the needful attention to the subject-matter; nay, the making of the abstract deepens the impression made by the speaker's words, and the student is actually able to carry away in his mind more of the lecture than if he merely listened to it or made an abstract in longhand. Longhand notes, like a leaden weight, keep the student constantly behind the lecturer, so that he has from time to time to omit in order to catch the speaker up. But the whole value of shorthand depends on the efficiency with which it is written. If the student has to attend to his writing, he cannot attend to the lecture. Hence the oft-repeated lesson that shorthand should be taught, and taught thoroughly, at school, so that the student starts in his pursuit of knowledge well equipped with this most useful weapon. If he has not learned it at school, it will still be well worth while for him to devote the needful time at the outset of his studies. He need not seek to acquire a very rapid speed, but he should be able to write 100 words per minute with the perfect ease of almost automatic action. An hour a day for three months will, in most cases, suffice to give the needful dexterity.

Shorthand is most useful to the student of what are called Arts and Literature. The facility which it gives of making brief abstracts of important facts and opinions is extremely valuable. My own old Latin and Greek text-books are studded with shorthand notes—notes of translation, on grammatical construction, on geography and history. But its value to the student of science is still greater. The well-known maxim of Captain Cuttle should be the motto of every student and investigator, and he who can write shorthand will, as a matter of fact, secure twice as many notes, and notes that are twice as useful, as he who does not write shorthand. "There is not time to make a note of it," is always hampering the longhand writer, but to the writer of shorthand the very meaning of the word "time" is almost changed. Minutes acquire the value that hours have to others.

To the student of medicine these remarks apply with peculiar force. Besides the set lectures that he has to attend, much of his teaching is at the bedside of the patient, or in the room in which out-patients are seen, and of the facts that come under his notice, and the lessons he receives, two-thirds at least are lost unless shorthand enables him to secure them. When he ceases to be a nominal student—for he should never really cease to be one—its value still continues, for in nothing is its advantage more strongly felt than in the process of taking notes of the cases of disease that come under his observation and care; notes which are often necessary, not only for his sake, but for the sake of the patient. Whilst the patient is describing his symptoms, they can be taken down in as full detail as is needful, and all the results of the examination can be recorded in a few minutes. I speak from experience, grateful experience, for I possess shorthand notes taken by myself of not less than twenty thousand cases of disease; of one kind of disease alone I have notes of nearly five thousand cases; and I am sure that the notes would not have been half as numerous, and not more than one-third as useful, had they been taken in longhand. And yet, strange to say, in no profession is shorthand less used, and I have observed with much surprise that I am the only member of the medical profession taking part in this Congress. In scientific work in medicine it is the same story. The facility the art gives in abstracting the work of others (I do not mean stealing), in collating facts, in arranging materials, in preliminary composition, in all but preparation for the press, its value is felt at every turn by those who possess the art. But for all this, shorthand must be well known; the worker must be able to write without thought and to read without effort, and the time spared from other work to acquire the needful dexterity will ultimately be repaid a hundredfold.

[I may anticipate a question that is sure to be asked by some readers of this paper, What system of shorthand is the best for these purposes? There is some difference of opinion as to the system best adapted for very rapid *verbatim* reporting; but there is a general consensus of opinion among shorthand writers of all systems that, for the miscellaneous uses here indicated, Pitman's phonography or phonetic shorthand is the best. Even for rapid writing it stands among the first, and is employed by many of the swiftest living writers. I have written it for nearly thirty years, and can testify to its excellence. Moreover, it has the advantage that there is a very large amount of literature published in it, including the works of many standard authors, several periodicals, and a dictionary of 50,000 words. Thus the facilities for acquiring the necessary ability to read this system are very great.]

SOME CONSIDERATIONS ON THE PATHOGENESIS OF DISEASES IN WOMEN.[1]

BY WILLIAM B. NEFTEL, M.D. NEW YORK.

AT the beginning of my medical career I was in charge of a ward for consumptives (tuberculosis of the lungs) in the large hospital attached to the medical school in St. Petersburg. At that time the absolute incurability of tuberculosis was a firmly established dogma, and any attempt to cure the affection, or even to arrest its progress, would have brought odium upon the investigator; certainly he would have been considered ignorant of scientific medicine, especially of morbid anatomy and pathological histology. Indeed, since the researches of Rokitansky, the progressively destructive character and the constitutional nature of tuberculosis were well known to every educated physician, and against that generalised destructive process it was thought medical science and art must always remain powerless. The utmost that could be done for these unfortunate patients was to alleviate their suffering by narcotics, and to diminish the colliquative excretions, at the same time carefully watching the progress of the disease to its fatal termination. The greatest care and study were devoted to the physical examination of these patients, and the diagnostic details had to be verified or corrected at the inevitable necropsy. It is true that at the post-mortem sometimes a characteristic cicatrix would be found in the lungs, thus indicating the healing of a former cavity, or, what was still more suggestive, such cicatrices would be found occasionally in the lungs of persons who died of other diseases, and in whom therefore a spontaneous cure of tuberculosis had undoubtedly taken place at some previous period of life. But such cases were considered simply as exceptions to the rule. And yet the truly scientific physician knows that there can be no exception in nature, and if there exists only one case of cure of tuberculosis, a similar result can be obtained in any given number of such cases, provided all the conditions are known under which the so-called exceptional case got well.

Entirely under the influence of the prevailing notions with regard to the incurability of tuberculosis, I met a case in private practice which by its peculiarity seemed to throw some light upon the etiology of this disease. In a large family, all the members of which were remarkably strong and healthy, and in which tuberculosis had never existed for generations, one married daughter, twenty-nine years old and mother of two children, was affected with pulmonary consumption. This patient was endowed apparently with the same robust constitution, and even the same features, as the rest of the family; she was brought up in the same locality and under the same healthy sanitary conditions, and yet was the only member of the large family affected with tuberculosis of the lungs. Her disease was diagnosed by competent physicians, and the diagnosis corroborated a few years later at her death.

This patient was for a time under my observation, and gave a detailed account of her previous history, and even explained the cause to which she attributed the origin of her disease. When a girl she was remarkable for robust health. During several years, while living in a fashionable

[1] Read in the Section of Medicine of the International Medical Congress, held at Washington.

boarding-school, she wore day and night a tightly-laced corset in order to have a small waist, and was admired for her beautiful figure. She continued to wear her corset, even while asleep, after having left school, and gave it up only after marriage. Even whilst at school she became pale, and was often troubled with a dry, hacking cough, which, after marriage, became more troublesome, and at times was accompanied by febrile movements and increased expectoration. After the birth of her first child the symptoms of pulmonary consumption became manifest. The disease progressed slowly, and at the age of thirty-three the patient died in an advanced stage of general emaciation.

This case, by the simplicity of the conditions under which the disease originated and developed, could be compared to the exactness of a pathological experiment on animals. Indeed, the patient was in perfect health, and without any predisposition to tuberculosis, like all the other members of her family, but became tuberculous after a special condition had been introduced—a condition entirely absent in the others—viz., tight lacing. The positive result of this experiment appeared to me at the time a complete demonstration of the fact that a steady methodical compression of the chest and of the upper portion of the abdomen, continued for a certain length of time, can produce tuberculosis in a perfectly healthy person without hereditary predisposition to the affection. Of course there was no difficulty to find a hypothetical explanation of the fact in accordance with the prevailing theoretical ideas. The compression interfered with the free circulation of blood in the lungs, producing stasis, chronic inflammation, and exudation. The latter, according to the existing blood crasis, could become either organised, or else transformed into pus, tubercles, &c. I was determined to test this hypothesis by experimenting on animals, when working in Virchow's Pathological Institute in 1860. I will give here only a few examples taken at random from my old notes, as all the other experiments present almost identical results.

Experiment 2.—May 22nd: I applied a bandage, producing moderate pressure, around the chest and abdomen of a well-nourished black rabbit.—23rd: The rabbit manifested a high degree of dyspnœa, and the conjunctivæ were congested and the urinary secretion exceedingly scanty.—24th and 25th: The symptoms increased in severity, respiration very frequent and superficial, and conjunctivæ dark-red, forming a thick chemotic wall around the cornea.—26th: The animal was found dead. At the necropsy the internal organs, especially those of the abdomen, presented an intense venous congestion, there was dilatation of the right heart, and arterial anæmia of all the parenchymatous organs.

Experiment 3.—On May 29th a bandage with very slight pressure was applied around the chest and abdomen of a well-nourished white rabbit. The symptoms of dyspnœa, &c., developed more slowly, but in a few days reached the same climax as in the preceding experiment, and on June 11th the rabbit was found dead, with the post-mortem appearances as in Experiment 2.

Experiment 11.—June 12th: A bandage producing considerable pressure was tied around a large rabbit.—13th: The animal breathed with great difficulty and the bandage was taken off.—14th. Bandage reapplied quite loosely.—23rd. The rabbit appeared much emaciated, though the morbid symptoms were not acute, and on the 29th was found dead. At the necropsy there was considerable emaciation of the whole body, with arterial anæmia, dilatation of veins and of right heart; in the lungs nothing unusual.

The fatal result was uniform in all the rabbits experimented upon, even when the bandage of the chest and anterior portion of abdomen produced but a slight pressure. I then tried to entirely exclude pressure, and applied the bandage very loosely. Under this modification the acute symptoms would not appear, and some of the animals lived to the end of the session (August), when they were killed mostly by Claude Bernard's piqure; in some, however, death occurred spontaneously. In all of them the necropsy showed arterial anæmia and venous stasis with dilatation of the veins and of the right heart. Especially the liver was always greatly congested and enlarged, but nothing of special interest could be discovered in the lungs. Only once a generalised pathological process was found, closely resembling, if not identical with, tuberculosis. I tried the same experimental method on dogs in Berlin, and continued it in Dr. Harley's laboratory, University College, London, but with a still less satisfactory result. It was almost impossible to keep the bandage in position on dogs, unless made of plaster-of-Paris, and even then the animals would gradually succeed in loosening it to such an extent that a positive effect could not be obtained.

Experiment 8.—May 30th: A plaster-of-Paris bandage was applied rather loosely around the chest and anterior portion of the abdomen of a dog. The animal manifested no morbid symptoms.—June 14th: The bandage became perfectly loose, and had to be reapplied.—July 4th: The dog was found dead. At the necropsy a rather moderate degree of arterial anæmia and venous stasis in the internal organs existed. At the lower end of the spleen was a small infarction of the size of a pea. The small intestines were spasmodically contracted. As this was the only case of spontaneous death in a dog after the application of a bandage, I suspected accidental poisoning in the laboratory.

All the other dogs were killed in various ways at the end of the session, the necropsy showing in those where the bandage was efficiently applied general anæmia and dilatation of the right heart, with venous congestion of the parenchymatous organs, but in no case was there any special affection of the lungs. I finally abandoned these experiments, partly because they did not corroborate my original expectation to produce tuberculosis by compressing the chest, but more especially in consequence of Villemin's researches,[2] which proved that tuberculosis could always be produced by inoculation with tuberculosis. Villemin's views met with much scepticism at the time, but at present they appear quite prophetic. For instance, the contagiousness and specific nature of the organic poison of tuberculosis multiplying itself in the system, &c. Villemin thus diverted the entire question into a totally different direction, which ultimately led to the discovery of the bacillus tuberculosis.

On account of the negative result of my experiments with regard to the etiology of tuberculosis, I have not published them, although they offer some positive results in other respects. They demonstrate the deleterious effects of a continuous compression of the chest and abdomen in animals, even when applied in a moderate degree. It produces general arterial anæmia and venous stasis in the parenchymatous organs, especially in the liver and other abdominal organs. As regards the question of tuberculosis, the important result obtained by Villemin was soon threatened to be entirely lost by the subsequent work of numerous investigators who with faulty unscientific methods apparently succeeded in proving that tuberculosis can be produced by inoculation not only with tubercular substance, but with almost any substance, organic or inorganic. Fortunately, the admirable researches of Cohnheim's first experiments, conducted with Fraenkel, which, owing to imperfect methods, had led to the erroneous assumption that tuberculosis was produced by the absorption of inspissated pus, and were later refuted by himself, proved conclusively that tuberculosis is a specific infectious disease caused by a distinct living micro-organism present only in genuine tubercular substances; but its actual demonstration was left to Robert Koch. The brilliant researches of the latter show beyond any possibility of doubt that the bacillus tuberculosis is the real and only cause of tuberculosis, that without it tuberculosis is impossible, and that inoculation with the pure culture of the bacillus always produces tuberculosis. The effect of Koch's discovery on the profession was overwhelming. Not only the diagnosis of the disease became always positive and easy, but it was generally expected that with the knowledge of the etiology of the disease the prophylaxis and the treatment of tuberculosis would become successful. In this respect, unfortunately, the general expectation has not yet been realised, and matters remain exactly as they were before Koch's discovery; now, as before, the fifth part of the population die from tuberculosis. Moreover, although the bacillus tuberculosis is omnipresent, and hence everyone is equally exposed to the infection, yet only certain persons of predilection, those with a so-called phthisical *habitus*, or under certain conditions, are liable to become affected with pulmonary consumption. In other words, besides the bacillus a certain predisposition on the part of an individual is requisite in order to become consumptive. Thus we are practically brought back to the same condition of things which existed previously to the disease of the bacillus, inasmuch as the primary factor in the production of the disease is the predisposition. So far we are able to form hypothetical

[2] Cause et Nature de la Tuberculose, &c. Comptes Rendus, lxi., 1866. Gazette Hebdom., Nos. 48, 49.

suppositions as to the nature of this predisposition to phthisis. For instance, a person may be considered predisposed when the respiratory mucous membrane is in a state of chronic irritation, and both the local and general resistance are diminished. The interesting researches of Metschnikoff[3] and his phagocytic doctrine, lend experimental weight and evidence to this hypothesis.

Again, the so-called phthisical *habitus*, a peculiar faulty formation of the chest, with weak respiratory muscles and general debility, is justly considered a predisposing cause of pulmonary consumption. Under these circumstances, the lungs not being thoroughly ventilated, the stagnant air and the slow pulmonary circulation afford a favourable condition for the settlement and proliferation of the bacillus tuberculosis. Perhaps the development of tuberculosis in the case above stated could be explained in a similar way. The prolonged compression of the chest by tight lacing in the perfectly healthy person seriously interfered with the normal pulmonary ventilation and circulation, and thus produced the same conditions which are so favourable for the development of consumption in persons with a congenital *habitus phthisicus*. I therefore maintain, though merely as a hypothesis, that compression of the chest by tight lacing, and continued for a certain length of time, constitutes a predisposing cause of pulmonary consumption.

As already mentioned, my experiments on animals show that a prolonged compression of the chest and abdomen invariably produces anæmia and venous congestion of the liver and other abdominal and pelvic viscera. Analogous results are frequently met with in human pathology. I often had the opportunity, especially in Berlin, of being present at the necropsy of women in whom the liver presented the characteristic malformation known as corset liver, and of which some illustrations are given in the classical work of Frerichs on Diseases of the Liver. In accordance with our present state of knowledge, the liver plays an important part in the hæmatopoietic function, and not only in the formation of blood, but also in its destruction. It is evident, therefore, that the distorted shape of the liver produced by tight lacing must necessarily interfere with its normal functions, and also that a continual disturbance and obstruction in the system of the portal vein must act injuriously upon the other abdominal organs. Hence the impairment of blood formation, of circulation, of digestion, and the engorgement of the internal sexual organs, the latter condition being a predisposing cause of obstinate chronic affections of the uterus and ovaries. The so-called corset liver is accompanied by a changed shape of the long framework of the chest, the ribs assuming a wrong direction, in which they become permanently fixed.

For the sake of brevity I will not draw clinical pictures of the morbid conditions induced by tight lacing and improper mode of dressing, for every medical practitioner is acquainted with these daily occurrences. It seems necessary, however, to call the attention of the profession to the following experiments, which have a direct bearing upon the subject under consideration. Schreiber[4] was able to produce experimentally albuminuria in persons whom he subjected to compression of the chest. After moderately compressing the chest in young and perfectly healthy persons, even during a minute and a half only, the urine always contained albumen in quantities varying from a trace to 2 per cent., according to the length of time the compression lasted. The albuminuria continued after the cessation of the pressure from one to thirteen hours, the urine containing occasionally, besides, albumen, hyaline casts, and red and white blood-corpuscles. Schreiber attributed the albuminuria following compression of the chest to stasis in the pulmonary circulation, produced by the diminished respiratory expansion of the lungs, and by diminished negative thoracic pressure. This condition leads secondarily to stasis in the renal bloodvessels, with consecutive alteration of the renal tissues.

There can hardly be a doubt in the mind of the medical profession that women's dress, especially the pressure exercised by it upon the chest and abdomen, must necessarily produce an injurious effect upon their health. Indeed, it would be quite impossible for anyone, unaccustomed from childhood to the female wearing apparel, to bear it for a single day without great discomfort. Only by a constant habit of wearing it a certain tolerance is created, owing merely to the fact that the compression gradually changes the natural shape of the internal organs, and even of its bony framework, just in the same way as the feet of the Chinese women become distorted by methodical compression. The last comparison is by no means exaggerated, and it can be truly said that the deformed feet of the Chinese women do less harm to their owners than the distorted viscera of our women. In view of this grave source of discomfort and disease it is hardly worth mentioning the minor inconveniences of women's dress. Anyone, for instance, who would try to wear several hours daily their high-healed shoes would soon become troubled with backache and general fatigue. I believe a certain kind of headache and facial neuralgia, induced by neuritis, is sometimes caused by exposure of the head, covered only by a fashionable bonnet in a northern winter. That such an uncomfortable mode of dressing unfits women for continuous and often hard work is self-evident. It seems strange that women, even those of great intelligence, do not modify their costume more in accordance with hygienic requirements, comfort, æsthetic taste, and common sense. Female fashions, as we all know, have their headquarters in Paris, where they are invented by a clique of uneducated dressmakers, totally ignorant of hygiene and devoid of æsthetic taste. From this principal centre the fashion instantly spreads to all the European courts and to America, and soon reaches the remotest parts of the civilised female world. All must submit to the dictates of fashion, which is the most absolute of despotisms, and against the decision of which, no matter how absurd and injurious, an appeal is impossible.

That a sanitary question of such magnitude effecting injuriously half of the population of civilised nations, and capable of transmitting morbid tendencies to future generations, is of vital importance and deserves immediate attention, will be admitted by every physician. I believe the only competent authority capable of remedying the existing evil is the International Medical Congress. After having tried in vain to influence the opinion of my own patients, among whom were a number of intelligent lady physicians, in favour of a healthy reform in the way of dressing, I now take the liberty of proposing to the International Medical Congress to appoint a commission to investigate the whole question of dress for women, and to report at the next meeting of the Congress. Such a commission might consist not only of physicians, but also of pedagogues, of artists, and of cultivated ladies from different countries, and would have in view, besides the health and comfort, the æsthetic taste of the sex, of which beauty and modesty are the distinctive characteristics. The work of the commission could begin with an inquiry into the different national costumes, which might offer some practical hints, as their usefulness has already stood the test of centuries. Above all, however, the commission could take into consideration the dress of the classical antiquity, as the idea of simplicity, grace, and comfort, which perhaps would become again a perfect model, when adapted to the changed requirements of modern life and to the various climatic differences. The inauguration of the much-needed reform in the dress of women by the International Medical Congress assembled in America would have a peculiar significance America has already powerfully contributed to the reform in the household affairs of women by the invention and introduction of the sewing, washing, and other machines utensils, and appliances, which have relieved women of so much tedious work, and have saved time now devoted to physical, intellectual, and social culture.

[3] Metschnikoff: Ueber eine Sprosspilzkrankheit, &c. Ueber den kampf der Phagocytengegen Krankheitserreger (Virchow's Archiv, xcvi.). Ein Beitrag zur Phagocytenlehre, &c. (Virchow's Archiv, cvii.). Also Forschritte der Medicin, &c.

[4] Ueber experimentell am Menschen zu eryengende Albuminurie Archiv für exp. Path. und Pharm.: 1885, iii.; and 1886, iv.

THE MEDICAL ATTENDANCE ORGANISATION Committee will resume its sitting on Tuesday next, when they will consider a circular which they propose sending to the Metropolitan Hospital Committees upon the "desirability of forming a union between the hospitals and provident dispensaries," asking them to appoint representatives to attend a conference on this subject. After this the committee will proceed to consider the scheme which they have prepared "for the medical attendance of the industrial classes in the metropolis." If the proposed conference on the first question can be held in the early part of November, it is hoped that the committee will be ready with a full report in December, when a meeting will be called to consider the whole question.

BEST COPY A

THE POSSIBILITY OF OPERATIONS ON THE ŒSOPHAGUS THROUGH THE STOMACH AS SHOWN BY DISSECTIONS.[1]

BY MAURICE H. RICHARDSON,
ASSISTANT PROFESSOR OF ANATOMY IN HARVARD UNIVERSITY, SURGEON TO THE MASSACHUSETTS GENERAL HOSPITAL.

A LITTLE more than a year ago my attention was first drawn to this subject by the patient whom I shall have the honour to present here to-day. At the time he came to the Massachusetts General Hospital for relief, his condition was so deplorable, and immediate action was so imperative, that there was no time for any preliminary work upon the cadaver for the purpose of studying the best methods of performing what has proved to be a new operation in surgery. The details of this case have already been published, with some few observations on the operation and the anatomy of the œsophagus.[2] Since that time I have made many dissections for the purpose of showing the best way of doing this operation, and of demonstrating the possibility of reaching any part of the œsophagus with the finger. In all the dissections the distance was measured from the upper incisors to the cardiac orifice, as well as that from the cardiac orifice to the point in the neck where external œsophagotomy is usually performed.

The patient, a man aged thirty-seven, tall and strong, weighing when in health from 160 lb. to 180 lb., had swallowed while eating a denture of four teeth. He had presented himself at the out-patient department of the hospital the next day, and I examined him then. The teeth were lodged near the cardiac end of the œsophagus. He was admitted to the hospital, and numerous attempts were made to dislodge them. At one time sufficient traction was used to break the coin probang which had been made fast to the plate. He was finally discharged from the hospital, having gained in weight, and it was thought that the foreign body had passed into the stomach.

Eleven months after the accident the man came again to the hospital, and the foreign body was found to be in the same place as before, fourteen inches from the upper incisors. The patient was reduced to 113 lb. in weight. He had continual pain, and it was with great difficulty that he was able to swallow enough liquid food to keep him alive. There were two methods of procedure possible, all attempts at removal through the mouth having failed: one by external œsophagotomy, in the manner described by Dr. Leroy Maclean of Troy, and so successfully performed by him;[3] and the other through the abdominal wall and stomach. I selected the latter method because it had been shown that the plate was very firmly impacted indeed, and it was very probable that it would be necessary to use the fingers in dislodging it. For two days before the operation the patient was nourished by enemata, and nothing was taken into the stomach but water and stimulants. After etherisation a cut was made parallel to the lower margin of the ribs on the left side, six inches in length, through which the stomach was drawn and held upon aseptic towels by assistants. A small opening through the stomach wall was next made midway between the curvatures, and forceps introduced for the purpose of grasping the plate. The cardiac opening could not be found. The cut was then enlarged enough to admit the right hand, which was introduced till the œsophageal opening was found. The foreign body was detected by the fingers about two inches above the diaphragm; after considerable careful manipulation with the index and middle fingers the plate was detached and removed. The mucous membrane of the stomach was closed with a continuous silk suture, after the method of Lembert. The patient made a good recovery, though complicated by slight lung symptoms, caused probably by the breaking of a small peri-œsophageal abscess into the lung by the manipulation of the fingers. He rapidly gained in weight from 113 lb. to 167 lb., and went to work as a teamster. He is now perfectly well, and able to do as hard a day's work as any man. In the selection of the above operation and in its first performance various questions arose, to the solution of which I devoted what little time I had. As will be seen, I was ignorant of several important points which I have since demonstrated. I am positive that the foreign body could have been removed with instruments had I known at the time what now I do about the subject.

During the past winter I have operated on sixty patients, and made various observations, the general result of which I herewith submit. The first question that naturally arose was as to the exact location of the foreign body with reference to the cardiac end of the œsophagus, and also with reference to the cricoid cartilage, in order that an intelligent choice might be made between gastrotomy and external œsophagotomy, it being taken for granted that that operation is better in which it is possible to use the fingers if instruments fail. The second question was:—What portion of the œsophagus is accessible to the fingers after the operation of external œsophagotomy, and what after gastrotomy? If gastrotomy is first performed, the best incision through the abdominal wall for reaching the cardiac end with the finger, and the best where instruments are to be introduced? Finally, the best incision through the walls of the stomach, and the details of the operation as to the manipulation of the stomach and œsophagus.

Location of the foreign body (or condition requiring operation).—If it is known how far the obstruction is from the upper incisors when the head is thrown back, in the position for passing the exploring probang, and if the distance from the same point to the cardiac opening is determined, it is evident that we can tell immediately whether the obstruction can be reached from below or not. The results obtained in the measurement of fifty-five subjects show that the distance from the upper incisors to the opening in the diaphragm is not constant. The average distance is fourteen inches and a half (36·8 cm.). Unfortunately there is no constant ratio between the height of the individual and this measurement. One subject six feet in height measured between the points mentioned fourteen inches and a quarter. Another, with a height of four feet ten inches, measured fifteen inches and a half. The greatest distance was seventeen inches, and the least ten and a quarter. The average distance from the cricoid cartilage to the cardiac opening was seven inches and a half in nineteen subjects, taken at random. The greatest distance was nine inches and a quarter, and the least six and a half. From these figures it must be said that it is not possible to locate the foreign body accurately, with reference either to the cardiac opening or the cricoid cartilage. If the individual is of average height, and with a neck of ordinary length, it is safe to say that the distance from the incisors to the diaphragm is about fourteen inches and a half. If the probang is arrested at a point more than thirteen inches from the incisors, the point of obstruction is probably at or near the cardiac end of the œsophagus. Inasmuch as the œsophagus is constricted at the diaphragm, it goes without saying that foreign bodies that have passed the constriction at the upper end are probably at the cardiac end. All parts of the œsophagus are accessible to the finger, either by gastrotomy or by external œsophagotomy.

In all the subjects examined, this fact was observed: In some of them it was quite difficult to reach every part, but it was nevertheless possible. The method of making these observations was to do first an external œsophagotomy in the usual way. Then the stomach was opened and the fingers of the left hand introduced into the cardiac opening. With the forefinger of the right hand in the upper wound and the forefinger and middle finger of the left hand in the lower end of the œsophagus, it was found possible, not only to make the fingers touch, but in many cases to make them overlap quite a distance. Coins and other bodies were passed from one hand to the other in both directions with great ease. In some cases it was necessary to use both the index and middle fingers of the right hand as well as the left.

It cannot be denied that these conditions of observation cannot be reproduced on the living subject, and that the results are therefore only approximate. It would be hardly practicable to do both operations on the same patient. If both hands are in use pushing towards each other, it is of course much easier to bring the fingers together and to push the foreign body from one finger to the other waiting to receive it. Yet even in the living I think it is safe to say that there is no point in the œsophagus which cannot be reached by the finger, either from above or below. The other source of error is in the fact that in the cadaver the

[1] Read in the Surgical Section of the International Medical Congress held at Washington.
[2] Boston Medical and Surgical Journal, Dec. 16th, 1886.
[3] New York Medical Record, vol. xxvi., p. 282.

COPY AVAILABLE

diaphragm is relaxed. This does not make any appreciable difference, however, because the opening in the diaphragm is so fixed to the bodies of the vertebræ that it does not share to any extent in the contractions of that muscle. It is possible to reach with the left hand three inches above the cardiac opening—that is to say, the length of the left middle finger. From above, through the wound in the neck, one cannot reach quite so far on account of the sternum and clavicle. One can, however, easily reach the arch of the aorta, and even hook the finger under it in some cases. In a few of the dissections, the measurement was made between the centre of the incision in the neck to the diaphragm. The distance was a little over six inches. Allowing in the average neck an inch and a half to two inches from the cricoid cartilage to the lower point of the incision in the œsophagus, in external œsophagotomy we have the average distance from that incision to the cardiac opening of five and a half to six inches.

The general conclusion to which I have arrived from these measurements and digital explorations is that the obstruction can be reached by the finger in all or nearly all cases when it is situated more than six inches below the cricoid cartilage. If less than six inches below the cricoid ring, it can be reached best from above, though in some few cases it may be just beyond the reach of the finger. Even in these cases instruments can be easily and intelligently applied. The measurements of the point of inspection or obstruction having been carefully made, and it having been demonstrated that the point in the œsophagus to be reached if necessary by the finger is not less than thirteen inches from the upper incisors or six from the cricoid cartilage, the operation of gastrotomy should be performed.

Inasmuch as the best argument in favour of gastrotomy is that the fingers may be used to detach the foreign body if all other means fail, it is evident that the probability of the introduction of the hand into the stomach is the most important element in the selection of the incision through the abdominal wall. In the case of the patient upon whom I have done this operation it seemed to me best to make an oblique incision under the margin of the ribs on the left side, directly over the stomach. By this incision the stomach can be recognised very easily, and drawn out of the wound so far that the subsequent manipulations can be made without the escape of the contents into the peritoneal cavity. From a large number of dissections for the purpose of deciding the question of incision in the abdominal wall, I have come to the conclusion that the oblique cut is the best on the whole for this operation, although the fingers can be introduced into the œsophagus with ease after making the median cut. The incision through the walls of the stomach for the purpose of introducing instruments into the cardiac end of the œsophagus may be made anywhere, provided that it is far enough to the right to avoid the convexity of the lesser curvature. All that is necessary is to put the lesser curvature on the stretch, so that it makes a straight line to the diaphragmatic opening. The cut through the stomach wall must be far enough to the right to allow the passage of the instrument along the sulcus between the anterior and posterior walls of the stomach, made tense as above. If the instrument is brought obliquely to this groove and passed upwards, all the time being pressed gently against the straightened lesser curvature, it will glide into the œsophagus every time with the greatest ease.

The incision in the median line was made on many subjects, and the conclusion was that it is the better method of operation where it is intended only to pass instruments into the œsophagus. In these observations it was found practicable to pass instruments into the œsophagus and withdraw coins with the greatest ease through an abdominal cut in the median line only two inches and a half in length. By enlarging the incision it was found to be quite practicable to introduce the hand into the stomach and pass the fingers into the œsophagus, but not so easy as by the oblique incision. It was also much more difficult to draw the stomach out of the peritoneal cavity enough to avoid the escape of the contents of the stomach into the abdominal cavity. The stomach having been exposed by the lateral cut through the abdominal walls, and having been drawn out of the wound, it must be held by an assistant in such a way that the lesser curvature is put on the stretch. It is better for the assistant to hold the stomach in both hands, so that the whole viscus is flattened out. He should stand on the left of the patient, and grasp the greater curvature. The operator standing on the right of the patient, holds the lesser curvature between the left thumb and forefinger, thereby making tense the lesser curvature and assisting in the passage of the instrument. Before doing this, it is best to introduce the hand into the peritoneal cavity and examine the diaphragmatic opening externally. With the stomach held as described, the opening through its walls may be made anywhere in the flattened surface, so as to avoid the large vessels. It goes without saying that the incisions should first be just large enough to get hold of the stomach with the thumb and fingers and draw it out so as to stretch the lesser curvature. An incision through the stomach wall can then be made large enough to introduce the instrument, by which, I believe, the foreign body can be removed with ease in the majority of cases. In cases of stricture of the œsophagus, the instrument can be passed with very small openings both in the abdominal walls and in the stomach itself. The wounds in the stomach and abdominal wall should be closed in the usual manner.

In the selection of the operation, whether by external œsophagotomy or by gastrotomy, another reason for the choice of the latter operation is that there is less danger of wounding important structures in the thorax, where the traction is downwards, than upwards. If the body is at the orifice, it is not in direct relation with either pleura, heart, or aorta. There is much less danger of lacerating the œsophageal wall in pulling down the foreign body a short distance than in pulling it up a considerable one. Finally, the prognosis after laparotomy and gastrotomy where the opening in the stomach is small I believe to be very good indeed. As to the frequency of the conditions requiring this operation, with the exception of impacted foreign bodies and stricture of the œsophagus, I know of no indication for the operation. It is certainly within the experience of nearly every surgeon that foreign bodies do become impacted low down in the œsophagus, and that the dangers which arise therefrom are very great. It is in the hope that in such cases this method which I have described will be tried that I submit these observations. Since Labbé's successful case in 1875 to the present time there has been no reported fatal case of laparotomy and gastrotomy for foreign body in the stomach. In the two fatal cases, one had been preceded by an external œsophagotomy, and in the other the stomach wall had been perforated by the foreign body. The list comprises the cases of Labbé, Cocher, Edicuborn, Thornton, Billroth, Credé, Bernay, and Polaillon.

AN EXPERIMENTAL CONTRIBUTION TO INTESTINAL SURGERY.[1]

WITH SPECIAL REFERENCE TO THE TREATMENT OF INTESTINAL OBSTRUCTION.

BY N. SENN, M.D., PH.D., MILWAUKEE, WIS.,

ATTENDING SURGEON TO THE MILWAUKEE HOSPITAL; PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY AND CLINICAL SURGERY IN THE COLLEGE OF PHYSICIANS AND SURGEONS, CHICAGO, ILL.

THE following is a synopsis of the paper:—

I. ARTIFICIAL INTESTINAL OBSTRUCTION.

1. *Stenosis.*—(*a*) Partial enterectomy and longitudinal suturing of wound. Traumatic stenosis from this cause becomes a source of danger from obstruction or perforation in all cases where the lumen of the bowel is reduced more than one-half in size. Longitudinal suturing of wounds on the mesenteric side of the intestine should never be practised, as such a procedure is invariably followed by gangrene and perforation by intercepting the vascular supply to the portion of bowel which corresponds to the mesenteric defect. (*b*) Circular constriction of intestine. The immediate cause of gangrene in circular constriction of a loop of intestine is due to obstruction of the venous circulation, and takes place first at a point most remote from the cause of the obstruction.

2. *Flexion.*—(*a*) Flexion produced by partial enterectomy and transverse suturing of wound. On the convex surface

[1] Read in the Surgical Section of the International Medical Congress held at Washington.

BEST COPY

of the bowel a defect an inch in width can be closed by transverse suturing without causing obstruction by flexion. In such cases the stenosis is subsequently corrected by a compensating bulging, or dilatation of the mesenteric side of the bowel. Closing a wound of such dimensions on the mesenteric side of the bowel by transverse suturing may give rise to intestinal obstruction by flexion, and to gangrene and perforation by seriously impairing the arterial supply to, and venous return from, the portion of bowel corresponding with the mesenteric defect. (*b*) Flexion caused by inflammatory and other extrinsic causes gives rise to intestinal obstruction only in case the functional capacity of the flexed portion of the bowel has been diminished, or suspended by the causes which have produced the flexion, or by subsequent causes independently of the flexion.

3. *Volvulus.*—As in flexion, a volvulus gives rise to symptoms of obstruction when the causes which have given rise to a rotation upon its axis of a loop of bowel have at the same time produced an impairment or suspension of peristalsis in the portion of bowel which constitutes the volvulus, or when a diminution or suspension of peristalsis follows in consequence of the rotation.

4. *Invagination.*—Accumulation of intestinal contents above the seat of invagination is one of the most important factors which prevents spontaneous disinvagination, and which determines gangrene of the intussuscipiens. Spontaneous reduction is not more frequent in ascending than descending invagination. The immediate cause of gangrene of the intussuscipiens is obstruction to the return of venous blood by constriction at the neck of the intussuscipiens. Ileo-cæcal invagination, when recent, can frequently be reduced by distensions of the colon and rectum with water, but this method of reduction must be practised with great care and gentleness, as over-distension of the colon and rectum is productive of multiple longitudinal lacerations of the peritoneal coat, an accident which is followed by the gravest consequences. The competency of the ileo-cæcal valve can only be overcome by over-distension of the cæcum, and is effected by a mechanical separation of the margins of the valve; consequently, it is imprudent to attempt treatment of intestinal obstruction beyond the ileo-cæcal valve by injections per rectum.

II. ENTERECTOMY.

Resection of more than six feet of the small intestine in dogs is uniformly fatal; the cause of death in such cases is always attributable to the immediate effects of the trauma. Resection of more than four feet of the small intestines in dogs is incompatible with normal digestion, absorption, and nutrition, and often results in death from marasmus. In cases of extensive intestinal resection the remaining portion of the intestinal tract undergoes compensatory hypertrophy, which macroscopically is shown by thickening of the intestinal coats and increased vascularisation.

III. PHYSIOLOGICAL EXCLUSION.

Physiological exclusion of an extensive portion of the intestinal tract does not impair digestion, absorption, and nutrition as seriously as the removal of a similar portion by resection. Fæcal accumulation does not take place in the excluded portion of the intestinal canal. The excluded portion of the bowel undergoes progressive atrophy.

IV. CIRCULAR ENTERORRHAPHY.

A modification of Jobert's invagination suture by lining the intussusceptum with a thin flexible rubber ring, and the substitution of catgut for silk sutures, is preferable to Czerny-Lembert sutures. The line of suturing, or neck of the intussuscipiens, should be covered by a flap or graft of omentum in all cases of circular resection, as this procedure furnishes an additional protection against perforation. In circular enterorrhaphy, continuity of the peritoneal surface should be secured where the mesentery is detached by uniting the peritoneum with a fine catgut suture before the bowel is united, as this modification of the ordinary method furnishes better security against perforation on the mesenteric side.

V. INTESTINAL ANASTOMOSIS.

The formation of a fistulous communication between the bowel above and below the seat of obstruction should take the place of resection and circular enterorrhaphy in all cases where it is impossible or impracticable to remove the cause of obstruction, or where the pathological conditions which have given rise to the obstruction do not constitute an intrinsic source of danger. Gastro-enterostomy and jejuno-ileostomy should always be made by approximation with partially or completely decalcified perforated bone plates. In making an intestinal anastomosis for obstructions in the cæcum or colon, the communication above and below the seat of obstruction can be established by apposition with decalcified perforated bone plates, or by lateral implantation of the ileum into the colon or rectum. An ileo-colostomy, or ileo-rectostomy by approximation with decalcified perforated bone plates or lateral implantation should be done in all cases of irreducible ileo-cæcal invaginations, where the local signs do not indicate the existence or occurrence of gangrene and perforation. In all cases of threatened gangrene and perforation, the invaginated portion should be excised, both ends of the bowel closed, and the continuity of the intestinal canal restored by making an ileo-colostomy by approximation with perforated decalcified bone plates, or by lateral implantation. The restoration of the continuity of the intestinal canal by perforated approximation plates or lateral implantation should be resorted to in all cases where circular enterorrhaphy is impossible on account of the difference in the size of the lumina of the two ends of the bowel. In cases of multiple gunshot wounds of the intestines involving the lateral or convex side of the bowel, the formation of intestinal anastomosis by perforated decalcified bone plates should be preferred to suturing, as this procedure is equally if not more safe, and requires less time.

VI. ADHESION EXPERIMENTS.

Definitive healing of an intestinal wound is only completed after the formation of a network of new vessels in the product of tissue proliferation from the approximated serous surfaces. Under favourable circumstances, quite firm adhesions are formed between the peritoneal surfaces within from six to twelve hours, which effectually resist the pressure from within outwards. Scarification of the peritoneum at the seat of approximation hastens the formation of adhesions and the definitive healing of intestinal wounds. Omental grafts, from one to two inches in width, and sufficiently long to completely encircle the bowel, retain their vitality, become firmly adherent in from twelve to eighteen hours, and are freely supplied with bloodvessels in from twenty-four to forty-eight hours. Omental transplantation or omental grafting should be done in every circular resection or suturing of large intestinal wounds, as this procedure favours the healing of the visceral wound, and furnishes an additional protection against perforation.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

THREE FATAL CASES OF NON-TROPICAL DYSENTERY.

(Under the care of Dr. CAYLEY and Dr. FINLAY.)

THE occurrence of non-tropical dysentery in England is so rare that the following cases will be found of interest. The liver does not appear to have been affected in any of these cases, but we have seen a case in which the disease (non-tropical) ran an acute course, and was attended with large hepatic abscess. For the subjoined notes we are indebted to Dr. Pasteur, medical registrar.

CASE 1.—Florence H——, aged nineteen years, single, was admitted on May 20th, 1886. Her grandfather on the mother's side died of phthisis, and her father's parents both died of bronchitis. Her previous health had been excellent, and she had never lived out of England. About a year ago she became subject to sore-throat, and her tonsils became enlarged. On the advice of her doctor she had the right tonsil removed. The hæmorrhage from the operation was severe, and did not cease completely for a week, the patient

EST COPY AVAILABLE

becoming much enfeebled by loss of blood. About three months previously to admission she began to suffer from constipation, and noticed blood in her motions at intervals, which had considerably increased of late.

On admission she was very anæmic, and complained of dyspnœa on the least exertion and loss of blood per anum, both during stool and in the intervals. There was sometimes pain in the lower abdomen and flanks. The abdomen was slightly distended and tense, with tenderness below the umbilicus. There was nowhere dulness or sense of local resistance, nor were there any signs of external piles. The liver and spleen were not felt below the ribs. The tongue was moist and slightly furred, the appetite good, and the bowels confined. The temperature was raised about one degree. The heart and lungs were perfectly healthy.

Progress and termination.—The first two stools passed consisted of clotted blood and mucus, and were accompanied by a good deal of pain. A rectal examination was made on May 25th, which revealed a circle of bleeding points (? minute polypi) about an inch above the internal sphincter. The previous night there had been severe abdominal pain, which necessitated the use of anodyne fomentations. The bowels acted on an average seven or eight times daily, the stools consisting almost entirely of blood. On the 26th the rectal speculum was again introduced, and the exposed bleeding points and "ulcers" freely dusted with powdered persulphate of iron, followed by a morphia and tannic acid suppository. By the mouth, chalk, catechu, and opium.

On May 27th she was transferred to the care of Mr. Henry Morris, who examined the rectum on the following day under ether and cauterised the bleeding ulcers, at the same time stretching the sphincter ani. Ergot was given twice daily, and a starch enema, with opium, catechu, and krameria when necessary. Three motions took place in the next twelve hours. The enema was administered three times.

May 31st.—Had persistent diarrhœa the whole of yesterday, the motions containing a little blood. Evening temperature above 101°.

For the next nine days the patient continued to get progressively weaker, the diarrhœa proving quite intractable. The pulse increased in frequency (100 to 140), and was at times intermittent. Blood continued to be present in most of the stools. The fæcal matters passed were light-coloured, but not particularly offensive. The evening temperature was on an average 102°, with a morning remission of about two degrees. The abdomen was tympanitic and considerably more distended than on admission, and occasionally very painful. Hot fomentations were employed continually. The tongue was smooth and raw-looking. On June 8th and following days there was troublesome ulceration of the mouth. On the 13th the mouth was better, but otherwise there was no change in the patient's condition. Towards evening she became rather suddenly collapsed, without increase of abdominal pain. She rallied somewhat with stimulants, but the stomach had become intolerant of all food, and death occurred the following evening.

Necropsy, thirty-eight hours after death.—Body fairly nourished. Heart and lungs healthy. Liver swollen and cloudy. Spleen very slightly enlarged. Kidneys apparently quite healthy. Abdomen: Cæcum and large intestine distended; mesenteric glands enlarged. Intestine: There were signs of catarrh at the lower end of the ileum, with injection of the mucous membrane, but no signs of ulceration. The caput cæci was free from ulceration, but throughout the remainder of the large bowel the mucous and submucous tissue was extensively destroyed, leaving only irregularly rounded islets of mucous membrane here and there. Over the intervening areas the muscular coat of the bowel was seen clean and free from slough. At the upper part of the rectum there was an area of about two inches in length almost free from ulceration, but at the margin of the anus a large ulcer was present, laying bare the muscular coat. Near this were several smaller ulcers. Some of the islets of mucous membrane showed bright injection at their margins. The muscular coat of the bowel was thickened throughout.

CASE 2.—Mary P——, aged twenty-three years, single, housemaid, was admitted on June 22nd, 1886. Twelve months previously she began to pass small quantities of blood at stool, without pain. This disappeared under medical treatment, and did not return until January, 1886. Since that date, however, the condition became aggravated. The act of defecation was preceded and followed by severe pain, and the quantity of blood lost was considerably greater than at first. On examination there were no external piles, but on introducing the finger into the rectum it was found to be much dilated above the internal sphincter, but not tender.

On admission to a medical ward at the beginning of July the temperature was subnormal; the pulse was soft and dicrotic (108); and anæmia and emaciation were both marked. The thoracic viscera were healthy. The liver dulness measured five inches vertically in the right nipple line, and the spleen was of normal size. There was tenderness in the epigastric and in both hypochondriac regions. A motion passed on July 6th was loose, of normal colour, streaked with blood, and not particularly offensive. Ordered to take lead and opium pill (four grains) three times a day.

During the next three days the bowels were moved three times daily, the motions containing a considerable quantity of altered blood. Was sick repeatedly on the night of July 9th. Pills discontinued. To be fed entirely by nutrient enemata and suppositories.

July 12th.—Feels better. Character and frequency of motions unchanged. Pulse very dicrotic.

17th.—Continues better. Diarrhœa as before, but no blood in stools.

19th.—Six motions containing blood.

25th.—Stools occasionally contain blood. Frequent sickness. Wasting rapidly. Ordered, ipecacuanha powder in full doses; iced champagne and mutton broth.

27th.—Sickness less. Motions as before, with the addition of membranous shreds and blood. Complains of slight abdominal pain.

There was a good deal of sickness during the next week, but the patient's condition was not appreciably altered. On Aug. 5th she was worse. There was more abdominal pain and profuse diarrhœa, and some delirium during the night. The pain subsided on the following day, but the diarrhœa persisted with varying intensity until death, which occurred on Aug. 12th. The temperature was subnormal, except on two occasions when it reached 100°, and during the last four days when the evening temperature was raised about one degree. The bowels acted on an average three times a day. The urine never contained albumen.

Necropsy, twenty-four hours after death.—Body greatly emaciated. Thoracic viscera healthy. No naked-eye lesions of kidneys or spleen. There was considerable gaseous distension of the intestines. In the lower three feet of the ileum there was well-marked thickening of the wall of the gut, and the mucous membrane of this portion was much swollen and shaggy. The patches of Peyer in this region were unduly swollen, and in the two lowest were several small, clean-cut, circular ulcers, with smooth bases. Besides these, there were several large, irregularly-shaped ulcers, with sharp edges and smooth bases, exposing the muscular coat; and over the last ten inches of the ileum the swollen mucous membrane was crowded with small, crater-like ulcers, both on and between the rugæ. In the large intestine the ulceration was much more general and extensive. From the valve to the splenic flexure the greater portion of the mucous membrane had entirely disappeared, leaving only a number of islets of varying shape and size. Some of the largest of these were undermined for a considerable way, so as to form bridges of swollen mucous membrane over collections of pus and shreddy caseous débris. In the intervening smooth areas the thickened muscular coat was laid bare. The serous surface of the gut was everywhere of normal aspect and free from adhesions. There was no contraction at any point. In the descending colon and sigmoid flexure the ulceration was rather less extensive, but of the same character. In the rectum the ulcers were still more scattered, and with one or two exceptions both smaller and shallower than elsewhere, and apparently of more recent date. Dr. Pasteur is unable to make any exact statement as to the colour and general appearance of the intestine at the time of death, as the specimen only came under his observation after being some time in spirit, and very brief notes were taken at the necropsy.

CASE 3 will be found described at length in the Middlesex Hospital Reports, 1885, p. 45. The patient was a woman, aged forty-five. She enjoyed good health until twelve months before her death, when she began to suffer from diarrhœa and tenesmus, which continued until death.

On admission there was severe diarrhœa with intensely fetid stools, occasionally containing blood, and "fleshy masses." She improved temporarily under large injections

BEST COPY

of nitrate of silver (twenty grains to the ounce), but eventually died of asthenia. The small intestine was not affected, but the large gut from beginning to end presented most typically the appearances found in dysentery. The other organs were practically healthy.

Remarks by Dr. PASTEUR.—The rarity of cases of non-imported sporadic dysentery is, I think, generally acknowledged. In support of this I may state that I have failed to find a single case recorded as such in the Transactions of the Pathological Society. And yet, in view of the clinical and pathological aspects of each of these cases, there cannot, I think, be any doubt that they are well-marked instances of the disease. Of the predisposing and determining causes I could get no information. The affection of the ileum in Case 2 is remarkable, and of uncommon occurrence even in the tropical variety of the disease. It accords strikingly with the description of it given by Hilton Fagge. Looking at the advanced stage of the affection in all three cases it is not surprising that treatment should have proved entirely unavailing. The absence of the characteristic fetor of the stools in the first two cases is worthy of note, and, judging by the writings of some authors on tropical dysentery, would have been sufficient to exclude the diagnosis.

BATH EASTERN DISPENSARY.

MALIGNANT DISEASE OF THE ŒSOPHAGUS; RELIEF BY GASTROSTOMY; DEATH TWENTY-EIGHT DAYS AFTER THE STOMACH WAS OPENED.

(Under the care of Mr. R. J. H. SCOTT.)

MARY ANN Z——, aged sixty-one. Has a consumptive family history. Had rheumatic fever sixteen years ago (?). About a year previously to admission she began to find difficulty in swallowing large pieces of food (no difficulty with fluids); this gradually increased until five months ago, when she had a fall (owing, she says to weakness), since which time the dysphagia has rapidly increased, and she has become much weaker. Five months ago pain commenced behind the larynx and on the left side of the neck, which also passed down the left arm, and was so great that she often lost sleep at night.

About April 14th the patient was in the following condition:—There was a tumour behind the larynx pressing it forwards; it was hard, firmly attached to the tissues around, and appeared as an oval swelling on each side of the larynx, about two inches in size from above downwards, and five inches across. There was pain on palpating the tumour, most marked on the left side, on which side also the cervical glands were much enlarged and tender. She was totally unable to swallow any solids, and with the greatest difficulty any fluids; usually on attempting to swallow fluids they were immediately ejected together with blood-stained mucus. She was frequently attacked with fits of coughing which ended in her expectorating mucus tinged with blood, and at times purulent sputa with a most offensive odour. She complained of a great craving for food, and was very thirsty. Passing urine also gave her great pain, the amount being only a few ounces in twenty-four hours, highly concentrated. The bowels were confined; the skin of her legs and arms was much shrivelled, and was red over bony prominences such as the malleoli, with a tendency to form bed-sores. The operation of gastrostomy, and the benefit she was likely to receive from it, having been explained to her, she consented to it being performed.

On April 16th, being under the influence of bichloride of methylene, and the skin of the abdomen having been washed with carbolic lotion, an incision was made about two inches and a half in length, parallel with, and about one inch below, the left costal cartilages. One or two small vessels were secured with catgut ligatures before the abdominal cavity was opened. The left lobe of the liver presented itself at the opening into the peritoneum; on pushing this to the right the lower margin of the stomach could just be seen moving with respiration under the left costal cartilages; this was seized with a pair of artery forceps and drawn carefully into the wound; a carbolised silk suture was then passed through its walls, by which it could be held in position in the wound. The stomach was next fixed to the abdominal wall by a double row of carbolised silk sutures care being taken only to transfix the muscular and peritoneal coats of the viscus. After eight sutures had fixed the stomach to the parietes so as to completely close the peritoneal opening, the part of the stomach exposed in the wound was then attached to the edges of the wound with small carbolised silk sutures. The wound was dressed with antiseptic gauze and salicylic wool. No spray was used, otherwise the operation was done antiseptically. In suturing the stomach to the abdominal wall the incised margins of the parietal peritoneum were brought well forward into the wound, so that as broad a surface as possible might be kept in contact with the visceral peritoneum. The dressing was not removed for five days, when the stomach was opened. During this time she was fed with nutrient suppositories twice a day. She expressed herself as feeling better soon after the feeding by suppositories commenced. No pain since operation. On April 21st the dressings were removed and the wound washed out with carbolic lotion; it had apparently quite healed. A narrow-bladed knife was passed into the stomach by the side of the silk ligature which had been used to bring the viscus into position whilst being sutured to the abdominal parietes; this caused the patient no pain. A No. 6 gum-elastic English catheter was now introduced by the side of the blade of the knife, which was withdrawn when the catheter was felt to have entered the stomach. Suction was made at the end of the catheter, with a sufficiently disagreeable result to prove that the tube was in the gastric cavity. A funnel and piece of flexible tubing was fastened to the end of the catheter, and six ounces of peptonised milk (warm) was gently poured in. The catheter was cut short to within three inches of the wound with a piece of salicylic wool in its open end, and the whole covered with salicylic wool and strapping. Nutrient suppositories stopped.

On the next day she was fed twice in the same manner, and with the same food. She expressed herself as feeling better than she had done for a long time, and that she had been able to pass more urine, which had given her great relief. She was allowed to sip a little Liebig beef and malt wine.

April 23rd.—Sutures removed. There is some excoriation around the tube, which is loose. A No. 8 gum-elastic catheter was now substituted for the No. 6 without any difficulty. She now takes ten ounces of peptonised milk twice a day. Salicylic wool packed around the catheter.

25th.—The gastric juice oozes by the side of the catheter, and keeps the surrounding skin excoriated. An elastic flexible tube, rather larger than a No. 12 English catheter, was now substituted for the No. 8, and an egg was beaten up in ordinary milk, about twelve ounces being slowly introduced twice a day. Patient says she feels much better. Urine gives no pain on passing, and is much increased in quantity. Has had a natural motion; says her skin feels much more comfortable, as it felt shrivelled before. The excoriated skin was painted over with a solution of nitrate of silver.

28th.—The skin around the wound now looks quite healthy. She is able to feed herself through the tube, which she takes out, cleans, and reintroduces, and she takes thickened beef-tea or mutton-broth at one meal, and milk and egg at another. As she complained of indigestion, she now adds a teaspoonful of liquor pepticus to each meal, which gives her great relief. Washes her mouth with cold tea.

May 6th.—Continues to feed herself very comfortably. The expectoration has increased and the tumour in the neck has grown larger. Nothing passes through the stricture. The glands in the left side of the neck are increasing in size and becoming more painful. Complains of great pain down the left arm, which she is now hardly able to use.

12th.—Pain in the arm and neck increasing. Still takes plenty of nourishment. Says the operation has given her immense relief from craving hunger and insatiable thirst; at the same time she is gradually becoming weaker.

The patient died on May 19th, apparently of exhaustion.

Remarks by Mr. SCOTT.—Though this patient only lived twenty-eight days after the stomach was opened, yet I cannot help considering that the operation was successful, gastrostomy being an operation the object of which is to relieve hunger and thirst, and as far as possible to prolong life, her condition before the operation being intense hunger, great thirst, and concentrated urine; all these were relieved, especially her pain in passing urine, which was no slight addition to her other troubles. There is no doubt that gastrostomy should be performed as soon as the patient is unable to swallow solids, but it is very difficult to induce patients to

T COPY AVAILABLE

consent to its being performed so early as this. In the present case the patient had attended at the hospital out-patient department quite three weeks before, and I had endeavoured to persuade her to have the operation done, but she positively refused till later on, when she was able to take no nourishment at all. In the *British Medical Journal* of May 21st Mr. Golding Bird of Guy's Hospital reports a case in which he tried immediate feeding, but the patient died six hours after the operation. I cannot help feeling that if the patient is in such an extremely exhausted condition gastrostomy will be of little use; and if of little use, will do harm by bringing discredit on the operation. The operation is not a painful one, and therefore, if we can only induce patients to consider that by having it done earlier they will prolong life and lessen some of the terrors of the kind of death they will ultimately have to pass through, we shall, I think, do our duty to our patients and give the operation its due value in surgery. The strength of the patient may be fairly well kept up by nutrient suppositories during the few days that the stomach remains unopened, and these may be assisted by injections of tepid water, about four ounces in quantity, three or four times in twenty-four hours; the water appears to become absorbed, and gives relief to the intense thirst often occurring in these cases. Mr. Charters Symonds, in the *Journal* of April 23rd, brings forward four cases of the treatment of epitheliomatous stricture of the œsophagus by tubage or permanent catheterism. Three of his cases died finally of ulceration extending to neighbouring parts—i.e., the pleura and lung, the trachea, and the retro-pharyngeal or œsophageal tissues. I think that the passage of a tube, however soft, through a cancerous ulcerating growth must tend to hasten the ulcerating process; whereas, on the other hand, gastrostomy, though it does not stop the growth of the tumour (excepting by preventing the irritation of attempting to swallow food and fluid), does not, in any way that I can see, hasten the end.

Abstracts
OF
INTRODUCTORY LECTURES, ETC.,
DELIVERED AT
MEDICAL SCHOOLS OF LONDON AND THE PROVINCES
AT THE
Opening of the Session 1887-88.

ST. GEORGE'S HOSPITAL.

INTRODUCTORY LECTURE BY MR. C. T. DENT, F.R.C.S.

AFTER adverting briefly to the changes that had occurred during the past year in the Medical School, including the opening of the new physiological laboratories, the lecturer proceeded to his main subject—The Nature and Significance of Pain. Such a topic, he remarked, needs no excuse to a medical audience, for day by day a physiology of the mind assumes more a practical shape. Between physiology and psychology there is still a great gulf; but as the former science progresses the space becomes narrowed, and the time must arrive when the two sciences will begin to merge one into the other. Whence comes the universal liability to pain in mankind? The apparatus required for a sentient being consists of a nerve beginning to receive the impression from without, a nerve to conduct it, and, most essential, a brain to realise it. Possibly in an animal as low down in the scale as the sea anemone the first indication of a nerve is found, for we consider that to be a nerve which discharges the functions of such. In its primitive form it is but a process of homogeneous matter jutting out from a cell placed beneath the integument. A stimulus applied to the extremity of the process produces some change in the central cell; but there is no brain, and therefore no sensation. As we ascend the animal scale the nerves are found to be more distinct and the nerve cells become massed together to form a brain. At some point or another the brain first acquires the dawning power of appreciating impressions, and at some higher point the property first creeps in of realising them; what was below this merely a sensation, above it becomes the idea of a sensation. Pain is only an intense or disorderly sensation, or one that interferes with health or comfort. It follows that of a great number of impressions we cannot say positively whether they are painful or not. In medicine and surgery we have little to do with these "borderland" pains. The impressions are commonly unmistakable. The mind is unable to realise pain as such, and only, as it were, to become aware that it is disturbed by a series of impressions too disorderly or intense for the comprehension. Here, possibly, we may catch a glimpse of the nature of pain, as being the unavailing effort of the consciousness to realise its own disturbance. The phenomena of living muscle instance well the graduation of impressions leading up to pain. Of the muscular movements of respiration we are all but unaware; more powerful contractions, as in athletic pursuits, give pleasure, while intensely powerful contractions independent of the will or control, such as occur in lockjaw, cause agony. Through the senses of sight and hearing the bulk of our education is conveyed to the mind. It follows that intellectual development renders us susceptible to new pains. Highly sensitive people are in fault usually, not in the nerve paths, but in the brain. As we can educate ordinary touch, so we can educate the sense of pain, as may be seen in the case of the so-called hysterical. Pain will be as real in such as in others, for subjective may be at least as vivid as objective sensations. A brain may be functionally as unduly tender as any given part of the body. The world is sorry for the person whose brain is disturbed by the impressions coming from a disorganised joint, and too often only laughs at the patient who has the same disorder brought about by a different condition, yet both are diseased, and indifference or mockery may be to the tender brain as a blow or a jar to the tender joint. The lecturer strongly advocated the study of the mental aspect of disease, especially in asylums for the insane, remarking that such institutions were really special hospitals possessing the unique merit that nothing could be said against them. In commenting upon another aspect of the subject—namely, the conditions which diminish suffering,—the lecturer remarked that pain was necessarily confined to the animal world, the liability being proportionate to the physiological development. As, therefore, this liability increases, so does the capacity of the intelligence, to minimise pain augment. Pain bears no fixed relation to the severity or importance of disease: some almost trifling diseases are attended by a vast amount, other grave disorders with a minimum, of suffering; a toothache may be agonising; and yet a person might have a large aneurysm, or his liver might be saturated with cancer, without his being aware of the condition; so here, if nature exacts, she also grants. It is noteworthy that the value and defensive use of pain is of importance principally at the moment, for there is no real power of recollecting pain. Much is said nowadays on the subject of "preventable diseases"; assuming for the moment that disease and pain are convertible terms, we should regret no less in the clinical work of a large hospital, the waste of energy, the squandering of the utility of existence, the failure to profit by the opportunity of life due to preventable pain. In the wards and out-patient rooms it meets our eyes everywhere; poverty, ignorance, and vice are the great factors. The fallacy is often urged that health cannot be bought; in truth it is a most marketable article. Much immunity from pain or disease might be purchased, for rest is the natural antidote to pain. Where would be the joint and spinal diseases, the incipient phthisis, and the like, if rest could be provided, not merely prescribed? Such patients could be taken in and put on the road to recovery, or at the outset cured, at a shilling a day, if there were adequate hospital accommodation and means to buy health for the poor.

KING'S COLLEGE.

LORD SELBORNE, after expressing the pleasure it gave him to be present on occasions of this sort, said that with regard to what had been said about the establishment of a teaching university for London and the granting of higher academical rank and power to those kindred institutions, he dared say it was a subject attended with difficulties—indeed he knew that it was so from his own experience, for in his own profession he was extremely desirous to see the Inns of Court organised on a footing more worthy of the resources of their historical and privileged position, and, moreover, one likely to be productive of a more scientific

and systematic study of law in all its branches. He could not help thinking that in London they had lost by the dislocation of the elements of education, which perhaps by better organisation might be more useful than they were. The University of London as it now existed stood very high indeed, and justly so, among the scientific educational bodies of the world, although it was not a strictly educational body, but a body which tested the results obtained elsewhere and rewarded them with very valuable degrees. Whatever happened, he trusted nothing would ever arise to diminish the value of the degrees of the University of London; but it was quite possible that an immense gain might be experienced for the better organisation of the teaching bodies in London, not only in medicine, but in law and the arts generally, which might either be united or not with the present examining University of London. All being really engaged in the same work, and most successfully engaged in it, he could not but believe that greater things were in the future before them than ever had been yet attained; and if this present movement should have that effect, he thought all good citizens, as well as all well-wishers of university education, might congratulate themselves upon it. In the course of some further remarks upon the comparative position of the professions, his lordship said that the profession of medicine hardly stood much below that of religion, for as a clergyman was always alleviating or applying remedies to the moral sufferings of mankind, so the work of the surgeon or physician was always to do good, and to alleviate those physical misfortunes which accidents or sickness brought to their fellowmen, and he thought they were certainly entitled to one of the most prominent positions among those who did good to mankind.

MIDDLESEX HOSPITAL.

AT Middlesex Hospital the usual custom of having an introductory lecture was departed from, and the session was opened by a distribution of prizes and a reception in the new buildings. The lecture theatre was densely packed with students and their friends, and numbers failed to gain admission. The Dean, Mr. Pearce Gould, read the annual report, which largely consisted of a sketch of the history of the school. From the foundation of the hospital in 1745, pupils were to be found in its wards, and some years later regular clinical lectures were given. In 1819 a room was set apart as a lecture theatre. Long before this, however—in 1773—the students had formed a medical society, which has continued to this day, and is now more flourishing than ever. This society is at once the oldest organisation connected with the school, and the oldest of students' medical societies in the kingdom. The first important connexion of the hospital with a medical school was on the establishment of the famous Windmill-street school, for the pupils of that school obtained their hospital practice at Middlesex Hospital; and when the majority of the lecturers and students migrated to St. George's Hospital, the hospital wards were opened to the pupils of the newly-founded University of London. On the building of University College Hospital in 1835, Sir Charles Bell, Sir (then Dr.) Thomas Watson, Mr. J. M. Arnott, Mr. Mayo, and the other members of the staff, founded "a complete school of medicine in avowed connexion with the Middlesex Hospital, and under the sanction of its patrons." After tracing the gradual growth of the school, the report went on to refer to the new buildings which were opened that day, and which made their accommodation complete. Former alterations and additions had satisfied special wants most pressing at the time, but now they could look round upon their school without the thought that something more would soon have to be supplied. There were theatres, class rooms, laboratories, museums, and library for teaching purposes; and in addition to providing accommodation for the comfort of all their students, they were able to offer to those who desired it the advantages of collegiate life. In reference to the schemes for establishing some source whence students at metropolitan schools could obtain a medical degree, the report stated that the school authorities had expressed their approval of both the plans suggested, as it was thought that either would secure the end in view, "it being always understood that the degree would only be granted after some further examination test than that now necessary for the usual 'Double Qualification,' while less severe and exacting than those conducted in Burlington House." After alluding to the changes in the teaching staff during the year, the success of the students at various medical examinations, the appointment of Dr. Finlay as inspector of examinations in medicine, the success of the school on the river and in the football field, the results of the various class examinations during the past year were read out, and the prizes were presented by the Lord Mayor of London, who afterwards gave a short address to the students. After congratulating the successful men, and encouraging all, he expressed his high sense of the value of the medical profession, and humorously referred to the universality of such a feeling when sickness or accident occurred. From his experience at Cambridge he felt confident that the new Residential College would greatly promote the welfare of the students. His lordship, after the usual vote of thanks, moved by Mr. Hulke and supported by Major Ross, M.P., then inspected the new buildings and the hospital.

ST. THOMAS'S HOSPITAL.

INTRODUCTORY ADDRESS BY MR. R. W. REID, F.R.C.S., LECTURER ON ANATOMY.

MR. REID, after welcoming the new students, said that the life of a medical student may be looked at in two aspects: firstly, in its professional; and, secondly, in its social. To the former of these two he should desire to direct attention. In its professional aspect there are two distinct periods of a student's life—viz., the *first two years* of his course, wherein he studies the structure and functions of man in his healthy state, with the addition of the sciences of botany, comparative anatomy, chemistry, and materia medica, in order to prepare him for the *second period* of his existence, wherein he investigates the human body in its diseased or injured condition, and the proper application of suitable means and remedies to relieve, if possible, this diseased or injured state. He should like particularly to draw a distinct line of demarcation between these two periods of a student's life, and no student ought to attempt to approach the latter without having first mastered the former; or, to put the matter plainly, no student ought to have anything whatever to do with the clinical treatment of disease before he has passed his examinations in the preparatory subjects of chemistry, anatomy, physiology, and materia medica. Anatomy, in its generic sense, is the science which determines the structure of organised bodies, whether dead or living. It resolves itself into vegetable anatomy or botany, treating of the structure of plants; and animal anatomy or zootomy, searching out the structure of animals. The latter divides itself, firstly, into a comparison of the structure of different animals with one another, constituting what is called comparative anatomy; and, secondly, into the investigation of any individual animal, constituting what is known as special anatomy. The anatomy of our calendar means the special anatomy of man as distinguished from that of the lower animals, and in the study of his structure in all its details students are called upon to begin their professional life. It goes without saying that we must understand the structure, appearance, and relations of the constituent parts of a machine before we can understand its working as a whole, or be able to put it to rights if it goes wrong. Similarly, it is evident that we must know the detailed structure of the human body before we can understand the function of its several parts, or attempt to repair it should any of those parts get out of order. As one would expect, therefore, anatomy is the oldest of all the medical sciences. The precise time of its origin is very uncertain. The Egyptian embalmers must have had some knowledge of the human body acquired in the process of the preservation of the dead, but as they were of the lowest order, and, abhorred by reason of their occupation, what knowledge they possessed they kept to themselves, and left no record of it behind them. We may divide the early rise and progress of the science from the fabulous ages to Hippocrates, from him to Galen, then to Vesalius, and then to Harvey, who died in the year 1657. After Harvey's day the School of St. Thomas's Hospital played an important part. Mr. Reid believed that this is the oldest regular anatomical school in England, and, if he said in Great Britain, he believed he was not wrong. Previous to its formation lectures upon anatomy were given at the College of Barber-

Surgeons of London (afterwards the Royal College of Surgeons of England) and at the Royal College of Physicians, by members or fellows of either college under the various titles of Reader, Master, or Professor of Anatomy. It is interesting to notice that these posts were, with a few exceptions, held by physicians and not by surgeons, and that Mead, a physician of this hospital, held the office of reader in the year 1711, when he delivered a series of lectures upon the muscles, and thus was one of the first to hold the still existing post of Arris and Gale Lecturer at the College of Surgeons. The practice of the dissection of the human body was introduced into this country by Caius (a name familiar to all Cambridge men), shortly after his return from Padua about the year 1546 or 1547. He first taught practical anatomy in the Barber-Surgeons' Hall of London. To William Cheselden is due the first formation of this anatomical school. After Cheselden, we find, as lecturers upon anatomy, the names of Else, also professor of anatomy at the College of Surgeons; Cline, whom Sir Astley Cooper speaks of "as a moderate anatomist, but sufficiently informed for teaching and practice, a man of excellent judgment, but one whom politics and agriculture have drawn from the contemplation of his profession." We then come to Sir Astley Cooper himself. Cooper taught anatomy and surgery for a period of thirty-five years, in conjunction first with Mr. Cline, then with Mr. Henry Cline, and lastly with Mr. Green. He was appointed Demonstrator of Anatomy in 1789, and resigned the surgery lectureship in 1824. Cooper's name, as far as anatomy is concerned, is chiefly associated, with his discoveries in connexion with the lymphatic system, descriptions of the parts concerned in different forms of hernia, and the structure of the breast, thymus gland, and testicle. A number of his preparations showing these different points are still preserved in the museum of St. Thomas's Hospital. He did not confine his attention solely to anatomy in its human aspect, for he was appointed Professor of Comparative Anatomy at the College of Surgeons in 1813. The lectures which he then delivered were the first set of lectures on that subject publicly delivered in London. They related to the classification of animals, and to certain anthropological subjects.

The study of human anatomy may be looked at in two ways:—Firstly, as the means of acquiring a knowledge of the structure of the body, whereby the student is placed upon a platform from which to view the functions of the body in health, and thereby to properly appreciate the effect produced upon the body should those functions become deranged; and, secondly, as a mental training. Mr. Reid claimed for human anatomy not only the study of the parts of the body which we can see by the naked eye, but also the study of minute details, too small to be seen in the ordinary way, but which, when treated with chemical reagents and otherwise specially prepared, become visible by the aid of the microscope. In the latter study, termed General Anatomy or Histology, he warned students not to come to too rapid a conclusion as to what they see when they view a part of the body through a microscope, as frequently the mode of the preparation of the specimen is apt to alter the minute appearances of the parts.

We may study the human body at different periods of its life, from the earliest appearance of the embryo to its fully formed state, and see the successions of forms which it presents at the different periods, constituting what is called Embryology or Developmental Anatomy. This study is extremely important, as by an understanding of it we can explain a large number of the irregularities and malformations to which the human body is liable. Again, we may study human anatomy with reference to the laws which have determined the structure of the body, constituting Morphological Anatomy; and lastly we may study man, or rather the human race, considered as a whole in its separate individuality, and in its relations with the rest of nature. This last branch of anatomical investigation is termed Anthropology. Now, as it is impossible in the matter of time for an ordinary course of lectures upon human anatomy to embrace all these several branches, the student will find that certain of them are relegated to lecturers upon other subjects. Hence he will find that histology and embryology are taught by the physiologists, and that what is left to the human anatomists is an investigation of the structure of the body in its macroscopic as distinguished from its microscopic sense.

As a mental training for the student beginning the study of medicine, Mr. Reid knew of none better than that of anatomy. In the first winter of his course he is called upon to master the subject of osteology. At first, one is apt to be somewhat discouraged by the apparently infinite number of facts, details, and unfamiliar names to be remembered in this branch. He could assure students of the first year, however, that by thoroughly applying themselves to the acquisition of these details their time is not lost; that by so doing they train their aptitude for observation and cultivate their memory. Mr. Reid remarked that of late it has been the practice of some to disparage the subject of human anatomy, for they say it is a worked-out subject, and simply consists in the recollection of a number of details which, almost as soon as they have been acquired by the memory, so soon they leave it. To such persons he should say that human anatomy is *not* a worked-out science, as the recent advances in the knowledge of the structure of the brain and spinal cord, and the exact position of some of the abdominal viscera, testify—advances which have formed the foundations for some of the recent rapid strides in the arts of medicine and surgery; and that the mastering of the so-called number of facts is the most healthy mental exercise the beginner can be put to; for, after all, the arts of medicine and surgery rest upon a basis of accumulated details arranged in their proper order. The sooner, therefore, the student gets into the habit of observing minutiæ, classifying them, and arranging them in such a way that he can thereby be able to draw deductions from them, so much it will be the better for him. He thought that the fault of there being a lack of interest taken in human anatomy does not rest entirely with students themselves, but that both teachers and examiners are greatly to blame. Under the present system teachers (and teachers are obliged to be guided by examiners, whatever may be said to the contrary) are apt to handle the subject as if it were one entirely set apart by itself and having no connexion with any other. They seem to strive to crowd into a short winter's course as many isolated facts as they possibly can, without having due regard to the object in view in the study of these facts. He was sure that if the huge amount of material to be gone over in the short space of two winters were sifted out more into what was important and what was less so, and that if all matter not having some reference to the future work of the student were eliminated from the study and examination of the ordinary "pass man," the labours of the first two years of a student's life might be greatly lessened. As far as the Fellowship and University honours men are concerned, the longer period of three years being allowed for their study, the subject might be treated in a somewhat more purely scientific way, looking at it more from the comparative, morphological, and mechanical adaptation sides—always, of course, presupposing an intimate knowledge of the simpler facts which have peculiar relation to the arts of medicine and surgery.

With regard to the younger and fascinating subject of physiology, Mr. Reid felt somewhat diffident in speaking. Within the last few years it has made such rapid strides, that unless one is in the position of what is called a "pure physiologist," one is hardly competent to say much about it. Physiology is a science which first of all supposes a knowledge of the anatomical structure of the body, and then applies chemistry and physics to investigate the laws of life. Unfortunately, according to the present curriculum, it is found that in the first year of their course students are required to study physiology at the same time that they study anatomy, chemistry, and physics. Happily, however, the authorities require a very elementary knowledge of physiology at the end of the first winter session, so that the student can devote the greater part of his first winter to chemistry, physics, and elementary anatomy. He strongly urged beginners to devote, in their first year, the larger part of their energies to the mastery of the preliminary scientific subjects of chemistry and physics. If they did this, and got rid of them by examination at the appointed time, they would find that they could throw themselves heart and soul, in their second year, to the more immediately medical subjects of advanced anatomy and higher physiology. As far as materia medica is concerned, Mr. Reid confessed that he was obliged to say that *per se* it is a somewhat dry and to the first year's student uninteresting subject. Its place, in the first summer, seemed to him an early one; still it naturally follows a course of chemistry. In its therapeutic sense it is anything but uninteresting, but considered in that sense, its place as one of the subjects of the first summer seemed to him nothing short of absurd, seeing that it implies, or ought to

imply, a certain amount of knowledge of physiology and of the different forms of disease, which knowledge the student does not acquire till the second year in the first case, and the third and fourth in the last. However, as his hearers were obliged to devote themselves to the different subjects in the order they were prescribed, all he could say was: Attend diligently to the lectures delivered upon that subject, and take advantage of the thorough and practical teaching in the dispensary of the hospital.

Mr. Reid concluded by recapitulating the facilities which St. Thomas's Hospital affords for students to acquire a knowledge of the subjects he had mentioned, and pointing out the importance of attendance at lectures and class examinations.

UNIVERSITY COLLEGE HOSPITAL.

INTRODUCTORY ADDRESS BY DR RADLIFFE CROCKER.

DR. RADCLIFFE CROCKER commenced by giving a cordial welcome to the new students, and gave them some advice upon the way in which they should spend their time away from the College and in the selection of their companions. In advising them about their work, he began by showing them how not to do it, by describing certain types of students, whose methods did not lead to success, the types selected being the "Casual student," the "Dilettante student," and the "Over-diligent student." He then proceeded to show how the student should do it, and impressed upon them the necessity of being as practical and objective in their work as possible, pointing out that if they neglected their opportunities of learning the use of instruments of diagnosis while students, they could never learn it afterwards, however much they might try, and that thus their stethoscope would become a mere symbol of their profession, like "a portable barber's pole"; while, after all, the best equipped student, when he left the hospital, was not a medical man of experience, but a medical man capable of profiting by his experience. He also urged upon them the necessity of thoroughness and accuracy in the examination of their cases, as it was not so much how many cases they saw, as how they saw them, pointing out that thus a large hospital might become a disadvantage to a student, unless he was careful not to hurry over his cases. He showed how University College Hospital, for example, which was a hospital of moderate size, had, from making the best use of their materials and thoroughly training the student, turned out men equal to any in the profession, and instanced, among those of the present day, Erichsen, Thompson, and Marshall among the surgeons, and Walshe, Jenner, Russell Reynolds, and the late Wilson Fox among physicians, as a proof that it was quality, not quantity, that was essential.

The lecturer then briefly alluded to the necessity of an M.D. degree being accessible to the good average London student, from which he was at present deb rred by the high standard and stringent regulations of the London University, and said that the teachers of London were determined that such a degree should be ere ong within the student's reach. Passing on to the time when the student had got through all his examinations, and taking up the case of those who sought to go into consulting practice, he showed them what a long and trying time must elapse before practice came, and urged them not to be led into the error of the day of advertising themselves directly or indirectly in order to obtain practice by a direct appeal to the public sooner than they would by addressing themselves to the profession at large, and to look rather to the general practitioner to send them patients; he showed how the advertisers were the least trustworthy men in the profession, and that they for the most part belonged to two classes, ignorant or comparatively ignorant men, who yet made great pretence of knowledge, and whom he denounced as quacks, although they were in the profession, while in the other class were men of ability who were in such haste to be rich that they could not wait until practice came through legitimate channels, and though they doubtless cured their patients eventually, they secured as much money out of them as possible. Further elaborating the subject, he classified the advertising part of the profession on the principle Touchstone used in the gradations of quarrelling, and described humorously the "Advertiser Churlish" as the man who wrote works in which he made out everyone to be wrong but himself, professing to have made discoveries which the blindness and narrow conservatism of the profession prevented it seeing and adopting, and when patients had been previously treated, depreciated directly or indirectly their former adviser in order to exalt themselves. The "Advertiser Valiant" was a man who paraded his ability to cure obstinate or incurable diseases, such as consumption, cancer, &c., and ascribed his success partly to being always ready to make the more serious diagnosis even in comparatively mild forms of diseases, and thus he was credited with curing phthisis, or whatever the disease might be, without really deserving it; further, even if he failed, he was always having a succession of new patients through his advertisements. The "Advertiser Quarrelsome" took the form of writing pamphlets against the abuse of various drugs in the treatment of disease or against operations in various surgical affections, and claimed to show how he avoided all such dangerous methods, and yet cured his patients more quickly and safely. The last two were, the "Advertiser Direct" and the "Advertiser Circumstantial." Pointing out that very few went so far as to advertise themselves directly, as they ran too much risk of being expelled from the profession, he described the "Advertiser Circumstantial," who, while appearing to praise something else, was really putting himself forward. As the most flagrant instances, he mentioned men who lent their aid in puffing sundry trade articles, either directly, by writing testimonials to the vendors, or indirectly, by allowing extracts from their works to be reprinted by the vendors of drugs, foods, or hygienic articles, and sent round as circulars, or left in public places. Another plan was to write works known as "bread-and-butter books," of more or less pretension, on common diseases, such as "gout," or some fashionable new treatment, such as "massage," to give the impression that they are authorities on the subject; and he urged the public to be more ready to listen to the advice of their family practitioner as to whom they should consult, rather than be led by these plausible writings, of whose merits they were not competent judges to choose for themselves. He felt, however, that in the face of the support that the public gave to quack nostrums, systems, and unqualified pretenders outside the profession, they did not seem likely of themselves to discriminate as to who were or were not the quacks within it. At the same time, he feared that the profession were not as active as they might be in labelling these men as they deserved. He urged that they should refuse to meet them in consultation more than they did, and that they should shun their acquaintance; that men of repute should be more careful how they allowed their names to be on the consulting staff of special hospitals, often started by inferior men to serve their own ends; that medical societies should not only exercise care in admitting their members, which he acknowledged they did, but that when men advertised, and in other ways showed themselves unworthy, the offending member should be summoned before the Council, and, if necessary, expelled, and gave an instance in which this had not been done in a flagrant offender. Similarly, that licensing bodies should always exercise to the full all the powers they possess to stop those who offended, even when the advertisements were not absolutely direct.

The lecturer concluded by warning those who sought to do consulting practice that they must be content to wait some time before they could make a reputation amongst their medical brethren, who could judge of the merits of their work in societies and other scientific meetings, from communications to medical journals and *bond-fide* works, which would lay a surer foundation for their reputation than that which they might get from ephemeral popularity. He exhorted them, one and all, not to let money-making be their sole aim, nor to allow, as a French writer put it, "their conscience to be a watch regulated by the clock of the parish," but, in the words of Polonius to Laertes,—

> "This above all—to thine own self be true;
> And it must follow, as the night the day,
> Thou canst not then be false to any man."

ARMY MEDICAL SCHOOL.

THE winter session of the Army Medical School was opened at Netley on Monday, the 3rd inst. The introductory lecture was delivered by Professor David Boyes Smith, M.D., F.R.C.P., who in his discourse gave a review of the valuable work done in various departments of science by

medical officers in India. During the present term there are no candidates for commissions in Her Majesty's British Medical Service, but, in their stead, twenty-three commissioned medical officers have joined to attend the courses of instruction. The same number of candidates for commissions in Her Majesty's Indian Medical Service also joined the School on the 1st inst.

ROYAL VETERINARY COLLEGE.

PROFESSOR THOMPSON LOWNE, F.R.C.S., in delivering the introductory lecture, said that the use and progress of scientific veterinary practice in this country had been exceedingly rapid. He remarked upon the petty jealousies that had arisen between two sister professions so knit together in a common cause, so unlikely to clash in interests, as the medical and veterinary, and said that in Germany the two professions were far more intimate than in this country, but he believed that the time was at hand when they would follow more closely the good example of their continental neighbours. Their knowledge of the causation of contagious epizootics had recently made vast strides. The discovery of the existence of all-pervading organisms, better known, perhaps, as disease germs by the laity, and the potency of these for harm both to man and animals, had thrown a new light upon contagious epidemics and epizootics, but there was still much to be learned in this direction. It was obvious that such matters could only be set at rest by prolonged and careful experiments extending over long periods of time. He was aware that such experiments had been recently carried out by the principal and his staff, and that a distinguished German, Professor Schutz, had been working in their laboratory. But there was less activity in forwarding knowledge of such methods in this country than could be desired. Lack of money set aside for such purposes was one of the causes of this. Our own apathy and carelessness were not worthy of the richest country in the world. There was another check upon original research in this country. The so-called Vivisection Act was in his opinion much to be deplored, as great difficulties were thrown in the way of all experimenters, which could only be overcome partially by a few men of known scientific reputation, so that original research into the causes of disease was seriously crippled in this country. Thousands of animals perished from such diseases as anthrax, rabies, diphtheria, consumption, and similar epizootics; man himself fell a victim to many epidemics; and yet such a mistaken policy threw every obstacle in the way of those who would fight the good fight against disease and death, even at times at the imminent risk of their own lives.

SHEFFIELD SCHOOL OF MEDICINE.

INTRODUCTORY LECTURE BY DR. SINCLAIR WHITE.

THE introductory address was delivered at the Firth College on Oct. 3rd.

Dr. White began his lecture by welcoming the new students who were about to enter the Sheffield School of Medicine. They were entering on a career second to none in point of interest, and equalled by few in point of usefulness. Although some other callings offered more tempting prizes, from a pecuniary point of view there were not many in which the risk of failure was less, provided the student possessed a fair amount of industry and health. He pointed out that medical science is a hard taskmaster and has no place for idlers, and that all who wish to attain eminence therein must toil on from point to point, until they have scaled the steep acclivities which lead to wisdom. In such a journey the quality that tells most is that of perseverance. A quick intellect and a retentive memory are valuable endowments; but the race is a long one, and the plodding man succeeds best in the end. Exactitude and thoroughness should be aimed at in all things, because, if a thing be worth doing, it is worth doing well; and the habits formed during student days form the groundwork of the character in after-life. Before another year had arrived a new medical school would be ready for use. This munificent gift they owed to the generosity of his senior colleagues and a liberal public. With the new students, and those who were to follow them, rested the opportunity of making it worthy of the efforts of its founders, and an institution of which their fellow-townsmen would be justly proud.

Dr. White devoted the greater part of his address to the subject of sanitation. As medical officer of health his position entitled him to speak with some degree of authority on the subject, and the occasion seemed a suitable one for urging the claims of sanitary science. After relating briefly the history of sanitation and dwelling on the achievements which hygienic reforms had brought about, he warned his hearers that the struggle against disease was a never-ending one. Lurking in our midst, in spite of all our boasting, there is much preventable disease, while the rapid growth of towns accentuates all the evils incidental to the aggregation of large communities. Hitherto the votaries of sanitary science have been drawn mainly from the medical profession, but the aims of the subject are far too great and good to remain a monopoly of any particular section of the community. Every true-hearted man must feel that to improve the physical, the social, and, indirectly, the moral condition of his fellow-men, to prolong life, and to curtail sickness, with its attendant poverty and misery, are objects worthy of his best efforts; indeed, looked at in this light, the aims of sanitary science are not very different from practical Christianity. Let those who come much in contact with the worst stratum of society reflect whether it is not a useless task to try to improve the social and moral character of these people, unless at the same time something be done to lift them out of the squalor in which they literally grovel. Let us go into their midst, taking heed where we walk, and, after having noted well their homes and surroundings, ask ourselves if it is possible to bring up children with pure minds and healthy morals in such places, where common decency itself is outraged. Without pausing to discuss whether the moral and social degeneracy of these people is the cause or effect of their squalid homes, it is sufficient to note that wherever filthy dwellings, foul air, and insanitary surroundings abound, there we are sure to find social and moral degradation of the people. It is unreasonable to expect pure water from a filthy spring; and sanitation must precede every other gospel if we would rescue these people from the depth of ignorance and depravity into which they have fallen. Give them more light and air in their homes, remove at once from their midst all forms of filth, provide for them paved and clean yards, and teach them that cleanliness is essential to self-respect. Then, but not until then, we may look with some degree of hope for the social and moral improvement in these people. There are a number of subjects connected with public health which still require parliamentary interference, but he who thinks that the mere enactment of sanitary laws will make the people more healthy is doomed to disappointment. The real remedy is to shed more light on God's laws. Men and women must be taught that it lies in their power to live longer, healthier, and happier by observing these laws; that cleanliness is essential to goodness, and even to godliness; that they have a mine of health in fresh air, soap and water; that the best heritage they can bestow on their children is a robust constitution; that intemperance, whether in eating, drinking, or in any other respect, is unmanly, degenerating, and suicidal; that infectious disease can be avoided, and that it is incumbent on them to avoid it by every known means; that as the fountain must be clean before pure water can flow, so the homes and surroundings of the poor must be cleansed before we can expect social purity. The task is an arduous one, but the objects to be attained are worthy of the struggle. The lecturer then alluded to the national and economic value of sanitation, pointing out that every healthy life was of a certain value to the State, and that preventable disease and death were enormous drains on our national wealth. The ever-increasing preponderance of town populations over that of rural districts had a tendency to reduce the physical vigour of the nation, and it was more than ever necessary that the conditions inimical to health and vigour in our large towns should be reduced to a minimum. Reference was made to the great amount of ignorance, even among the educated public, on hygienic matters, and the failure of the Educational Department to teach hygiene in elementary schools. The lecturer concluded by urging on his fellow-townsmen the desirability of forming a sanitary association in the town.

NEWCASTLE COLLEGE OF MEDICINE.

THE winter session of University of Durham College of Medicine was inaugurated on the 4th inst. in the Wood Memorial Hall. Dr. Heath presided, and the prizes were distributed to successful students by Sir Lowthian Bell, F.R.S. The civic authorities were represented by the Sheriff of Newcastle. The Wood Memorial Hall, it should be explained, does not belong to the Medical College but to the adjacent building of the Mining Engineers. This will make Dr. Heath's opening remarks more intelligible to outsiders. He said "it was probably the last meeting of that description that would take place in that fine hall. That was not because their friends—the mining engineers—were less likely to be generous and liberal to them in the future; but because he hoped before next October to be in a hall of their own, as handsome as that and larger, and, he trusted, more convenient for their purpose. They were, in fact, about to leave their own home and to enter new premises, where they hoped to be as fortunate and successful as they had been in those they had hitherto occupied. They were absolutely engaged in the erection of a new college, which they trusted would be an edifice not unworthy of the city of Newcastle. They proposed to establish in it a new department, which they hoped would be of great public utility, and that was the department of comparative pathology, which was a branch of a much wider subject which had been discussed for the last thirty or forty years, and which had greatly occupied the attention of the medical profession, aiming as it did at searching out the origin of disease and its cause, and destroying it at its root."

THE PROFESSION OF MEDICINE IN JAMAICA.

SOME three years ago the people of Jamaica imported into their island the machinery of popular government, and acquired under the electoral law which was then passed by the local Legislature a very broad scheme of representation. Among other results of the important change thus effected in the constitution of the governing body have been some which seriously affect the standing and prospects of medical practitioners in the colony, and are of special interest to Englishmen who may contemplate making the island the sphere of their work. In order, however, to explain the present position of the medical profession in that part, it is necessary to give a short history of the relation of the State to the art of medicine for some few years past.

Ten years ago the Government awoke to the fact that the sparse and scattered population over which they ruled was very ill-provided with medical attendance. The state of things which then existed there is difficult of realisation by English readers. The case of an English rural district presents no parallel. The few medical men who had established themselves in the island were for the most part settled on the coast, and over a large proportion of the country districts it would happen that the nearest doctor would reside twenty or thirty miles away. The natural and obvious consequence was that the health of the community was sadly neglected. Private ignorance, if we may use the term, kept the rural population undefended and an easy prey to all the maladies that, in a tropical country, attend upon insanitary conditions, and official ignorance of the state of the public health in parts remote from the capital paralysed the efforts of the Government to cope with preventable disease. It was natural and wise that in such circumstances the Government should adopt a scheme for promoting the settlement among the rural population of a sufficient number of medical men. The earliest efforts made in this direction need not now detain us. Suffice it to say that they were not conspicuously successful, and in 1871 Deputy-Surgeon-General Mosse, C.B., of the Army Medical Staff, was appointed chief of the local medical department, and entrusted with the work of reorganisation. The scheme adopted by the Government under the advice of this distinguished officer was, broadly, as follows:—

English medical practitioners were invited to settle in the colony on the footing of members of the Colonial Medical Service. Their duties in that capacity would embrace "the medical charge of paupers on the parochial rolls, and of any hospital, almshouse, or prison in their districts"; they would be further required "to attend upon the constabulary; to exercise a general control and superintendence of the Government dispensaries of their districts; to vaccinate; and to advise the Government and parochial authorities on questions affecting the public health." These duties, though multifarious, were not too onerous to permit of simultaneous attention to private practice. Indeed, in the scheme put forward by the Government the private practice figured as the chief field of the medical man's labour and the principal source of his emoluments. The stipends offered by the Government were fixed at amounts varying from £150 to £250 a year; but, at the same time, it was stated that the value of the private practice would vary from £150 to £600, and the exact relation in which the medical man was to stand both to the Government and the population was accurately defined in the following terms:—"The district medical service of Jamaica is, in fact, to be regarded as a system in aid, the object of which is to diffuse medical assistance throughout the several parishes by inducing practitioners to locate themselves in districts which without some contribution from the Government would be altogether destitute of aid and advice, and the pay received by the medical officer from Government may be regarded as a retainer for professional services to be given as a private practitioner within the area in which he resides."

Such in its main outlines was the scheme of 1881. There were details, to which it is not necessary to refer particularly, conceived in the interest of the medical staff, which would of course suggest themselves to the mind of an old army medical administrator like Dr. Mosse. Two of these minor points, however, should be mentioned in passing, as they have a particular bearing on the controversy which has unfortunately arisen. These were the exercise of Government control over the local practitioner exclusively through the superintending medical officer; himself of course a medical practitioner of eminence; and the provision of a small pension upon retirement.

This scheme obtained the professional popularity which it deserved. A sufficient staff of thoroughly capable medical men was secured; the country was portioned out into districts measuring about twelve or fifteen miles across, so that medical aid, if not exactly brought to every door, was at least brought within reach; and, what is only less important, every district was provided with its own officer of health; while the several officers, on their part, were made responsible for districts large enough no doubt to require constant attention, but not too large to permit of their doing justice to them.

There was, however, one weak point in this generally excellent scheme. The duties of the medical officer had been somewhat loosely defined, and there thus arose the risk of these duties growing, little by little, more and more onerous without any corresponding increase in the medical man's emoluments, so as in the end to interfere seriously with the private practice which he had been encouraged to look for—which, indeed, originally afforded the principal reason for locating him in his district. This state of things has actually occurred. In some measure the result has come about spontaneously, as one may say. It is the fate of public officers in all parts of the civilised world to be called upon to furnish the Government with multifarious returns, and it is nowise surprising that there should be a gradual extension of the demand for returns as time wears on. This of itself has attained proportions in Jamaica which have long made the members of the medical profession there feel it to be an irksome and even oppressive task. Yet at its worst this is a comparatively small matter, and it is one which might be expected sooner or later to be satisfactorily arranged. The more serious ground of complaint has arisen upon the recent action of the Legislature in connexion with a reform of the Poor Law.

It is easy to understand that the relief of the poor is a matter of some considerable importance in Jamaica at the present time. The island, like other countries which depend for their prosperity in any considerable degree upon the sugar market, has suffered seriously from the depression of late years. Quite recently, also, there has been a falling off in the demand for labourers for the Panama Canal, and that has closed an important channel for the relief of destitution. Still, Jamaica is not nearly so badly off as some other of the West Indian Colonies. It has the capital advantage of

possessing an assortment of staples, and cannot therefore be reduced to extremity by the failure of one. Thus it has happened that growth in the fruit and coffee trades, for example, has done much of late to compensate the community for the shrinkage of the trade in products of the sugar-cane. We in England, however, have good reason to know that compensations of this kind go hand-in-hand with much individual and class suffering. The community, as a whole, is much more versatile than its members, whether taken as individuals or as groups; and thus it happens that the hardship falls upon one part, while the compensation alights on another part, of the body politic. The remedy, so far as legislation can afford a remedy, is found in distributing the burden of poor relief as widely as possible over the community. But this principle the Jamaican Legislature does not seem to have adequately grasped. By a statute recently passed—Law 6 of the year 1886—the Poor Law of the island was remodelled, and a large and very undue proportion of the additional burden was cast without any valuable consideration upon the shoulders of the medical staff. Thus, by Section 29 of this statute, the district medical officer is required—(1) To make a monthly return of the sick poor to the parochial board; (2) to examine in a prescribed manner any person in the receipt of poor relief or any applicant for poor relief whom he is by the inspector of the poor requested to examine; (3) to give to the parochial board and to the inspector, when required, any "reasonable information" respecting paupers under his care; (4) to make such written reports as the central or the parochial board shall require relative to any sickness prevalent among the poor of his district; (5) to attend the parochial board meeting when summoned; and (6) to give written certificates, when required, to the parochial board or inspector of the nature of any pauper's illness.

Some of these duties, such as examining paupers and attending parochial meetings, are very onerous, involving, it may be, considerable travelling, in addition to the expenditure of time and energy upon the work itself. Yet all these are added to the duties heretofore discharged by the medical staff on the strength of the Government "retainer." But the time has assuredly gone by when this term can be applied to the allowance which is no longer even a liberal remuneration for the duties imposed. But while, on the one hand, the Government has derogated thus seriously from its own grant of a retainer, it has, on the other hand, pressed the theory of a retainer to the furthest point—so far, at least, as new members of the service are concerned—by binding them to a prescribed scale of fees. Such interference with individual freedom of contract, if justifiable at all, can be justified only on the ground of a special right to dispose of the services of medical men derived from the Government subsidy, and when that subsidy has been converted by the annexation of onerous conditions into a bare equivalent, the interference is convicted at once of being destitute of even the shadow of a just and sound foundation. Where in matters of so great moment the Government has shown such an absence of faculty to appreciate the equities of the position, it is not surprising to find that they have also withdrawn the advantages, which were granted in connexion with the earlier appointments, of a retiring pension and the mediation of a chief medical officer between the Government departments and the district medical man. These things add considerably to the dissatisfaction of the medical profession in Jamaica, and they make the prospect a very undesirable one for the men now and hereafter joining the staff. Altogether it may be admitted that the Jamaican Legislature displays a certain zeal for economy in the public service, but it is not "according to knowledge," and the result of the very inequitable apportionment of burdens to the medical practitioners in the colony can hardly fail to seriously affect the efficiency of the profession there.

SOCIETY FOR THE STUDY OF INEBRIETY.

A QUARTERLY meeting of the Society for the Study of Inebriety was held in the rooms of the Medical Society of London on Tuesday last, the president, Dr. Norman Kerr, in the chair.

Dr. E. P. Thwing, New York, read a paper on American Life as related to Inebriety, in the course of which he stated that the disease of inebriety, apart from the vice of drunkenness, was more prevalent in America than in England, was more rapidly developed, and attained to a higher degree of intensity. Americans could not stand liquor as Englishmen could, and the same greater susceptibility to the action of other narcotics prevailed. Turks, Hollanders, and Chinese could use tobacco and opium without impairing their eyesight, but Americans suffered in heart and brain, eyes, teeth, muscle, and nerve. This heightened American nervous susceptibility was the result of combined physical, psychic, political, and social conditions. For example, there were on that continent extreme thermal changes, he having known a leap in twenty-four hours from torrid heat to frosty chill. Political campaigns, with their brain pressure, contributed largely to inebriety. Over-pressure in education, the emulous rivalries of business life, speculation, and the national headlong rush through life, all acted powerfully in the production of the enormous development of the disease of inebriety in the United States.

The President narrated several cases observed by him in America twenty years ago, illustrative and confirmatory of Dr. Thwing's propositions.

Mr. Walter Kennaway treated of Asylums for inebriates in New Zealand, pointing out that, when the inebriate's brain was so sodden and saturated with poison that it had lost all sight of moral perspective, there was but one rational mode of cure. There must be deprivation of freedom and removal from present surroundings to rid the system of the poison and allow the will to recover its tone.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

To the Editors of THE LANCET.

SIRS,—The letter in your issue of last week from Dr. McLiesh ought not be allowed to pass without the presentation to your readers of the other side of the question of compulsory notification of disease.

In Reading, a borough until lately with a population of nearly 50,000, and recently enlarged to include 60,000, compulsory notification has been enforced for six years, with, according to my experience, the cheerful acquiescence and hearty co-operation of not only the medical practitioners, but also of the laity within the municipal jurisdiction. Undoubtedly the successful institution of this necessary safeguard, its good reception by practitioners and the public, and its subsequent smooth working have been mainly due to the tact and temper of our lamented colleague and friend, the late Dr. Shea, medical officer of health, who with rare professional qualifications for his official position combined unusual powers of conciliation and persuasion. He, appreciating the difficulties likely to arise from the delicate and confidential relations subsisting between practitioner and patient, wisely imposed a *dual* responsibility, by which, under a penalty of ten pounds, notification of infectious disease has to be made both by the medical attendant *and householder*, the former receiving a fee from the sanitary authority for his certificate. I apprehend from Dr. McLiesh's letter that the conditions at Bolton are different, in that, instead of the responsibility of notification being mutually shared, the householder is entirely relieved, and the whole onus thrown on the medical attendant. Herein lies the obstacle to the smooth and effectual working of the system at Bolton. Nor would the difficulty be obviated by throwing the responsibility on the householder alone. In the former case the doctor is placed in the invidious position of an informer, while in the latter the temptation is presented, through prejudice, to dispense with medical supervision, and conceal the existence of infectious disease. The success of compulsory notification of infectious disease in Reading, is, I believe, chiefly due to this plan of imposing a double obligation respecting it, and, wherever the system may be adopted, I would urge that this condition is essential to its favourable reception and the avoidance of friction. Something, of course, depends on the relations existing between the practitioners of the district and the medical officer of health, and these will be pleasanter if he devote his whole time to his duties and do not compete with them in private practice. In conclusion, I believe I am warranted in asserting that, subject to the condition of double obligation, the medical profession in Reading emphatically approve of compulsory notification as being greatly to the public advantage. I am, Sirs, yours faithfully,

Reading, Oct. 3rd. 1887. J. HOPKINS WALTERS.

THE LANCET.

LONDON. SATURDAY, OCTOBER 8, 1887.

WE are quite disposed to agree with a remark of Dr. HANDFIELD JONES at the opening of St. Mary's School on Monday, that the Introductory Lecture is a thing to be maintained and approved. He was speaking with special reference to Mr. CRITCHETT's address. But, without any special reference, it seems fit that young men entering the great Temple of Medicine, and preparing to devote their life in its service, should be reminded of their high calling and of all that is needed to constitute medical character and to enable them efficiently to do medical work. Life is prosaic enough, and medical education in its details is apt to be somewhat dry; so that it is a kindly thing in one who has the power or the right to utter words of encouragement and inspiration, and to point out how the most prosaic of duties may be made interesting, and the driest of studies a means of enjoyment. There are students in whom the sense of duty or the love of work is strong enough to make them independent of such encouragement, and there may be others on whom all such influences are thrown away. Neither of these classes can be injured by an Introductory Lecture; and certainly neither of them constitutes the bulk of medical students, with whom a word fitly spoken on an eventful day in their history is likely to have very lasting consequences. No doubt the behaviour of some audiences at the Introductory is irreverent and disrespectful. So is the behaviour of the classes of many teachers; but this is often the fault of the speaker, and depends on the absence of that subtle quality of authority which is itself a gift, and which makes the class rooms of some men as decorous as a church. The individual addresses of this year embraced as usual a great variety of subjects. They should all be read by those who would learn the great fact that medicine is a large, many-sided subject, linking together individualism and society, body and mind, nature and art, man and the whole inferior creation. It would be invidious to make distinctions when each contained so much. Some of the lecturers were specialists of eminence, but their specialism was not obtruded. One could scarcely have told that Dr. CROCKER was a distinguished dermatologist, so broad was the basis of his eulogy of University College, and of such universal application was his advice to students to trust for reputation and success only to such work as would stand the judgment of men of their own profession and carry their approval, and his definition of quacks and advertisers of all sorts, whether in the profession or outside it. Mr. CRITCHETT, indeed, in his admirable address, did betray his affection both for his specialty and for one who was one of its greatest ornaments; but he did so in terms of perfect taste and much interest, and, taken as a whole, his account of the medical art and the means by which it is to be learnt and practised, was wonderfully proportioned and complete. Nor should we omit one word of remark on the silence and attention with which it was listened to. Dr. STURGES, in common with several other lecturers, discussed the burning question of a degree for London students, giving it the larger form of a true Teaching University for London. As might have been anticipated, his treatment of the subject was critical and discriminating, and may well be studied by all who are interested in this pressing matter. Equally worthy of attention were his observations on the examining bodies, and their supervision by the Medical Council. We hope he is not too sanguine of the good to be achieved by the Inspectors created by the new Act who have an enormous work to do in a very short time. At St. George's, Mr. DENT discoursed on a well-worn, but mysterious subject, the Nature and Significance of Pain, and he contrived to bring his scientific thoughts on the subject to a most practical conclusion. He made mincemeat of those who sit down in despair, and regard pain as inevitable and incurable. He magnified the discoveries which abolish pain for great surgical purposes. But beyond this he declared that health was "indeed a most marketable commodity," and that a shilling a day would procure for thousands much immunity from pain. Such cases as those of joint and spinal disease, of incipient phthisis, he maintained, might be relieved and saved if the rich and the strong would come to their help, and to the support of those medical charities which contemplate their relief. Mr. REID's lecture at St. Thomas's was one of the best in its suggestions as to the course of medical education, and in its history of anatomical teaching in particular. Sir ANDREW CLARK presided, in the unavoidable and regretted absence of Mr. JONATHAN HUTCHINSON, at the dinner of the London Hospital School, inaugurating the splendid new buildings, which, as Sir ANDREW said, do so much credit to all concerned — the architect, the medical staff, and the house committee. Sir ANDREW descanted with characteristic eloquence and with justifiable pride on the history and work of the school, and on the proofs on every side of its vigour and capacity to adapt itself to new conditions. In common with Mr. PEARCE GOULD at the Middlesex, he boasted that his hospital was one of the earliest to use hospital cases for purposes of clinical teaching. We may leave two such good-natured combatants to say which was first. Both were doubtless early in the field. We want more information about the methods of medical teaching in London a hundred and fifty years ago. For most men who did not go to the Scotch or the foreign universities it doubtless consisted chiefly of apprenticeship with a barber-surgeon Very different is the case of the students of to-day in London, who have a field of observation and study unequalled in the empire, and whose teachers vie with each other in demonstrating the last improvements in art and the last discoveries in science. If the students of to-day do not learn their profession, and if they fail to practise it with dignity and efficiency, it will be their own fault.

WHETHER a lunatic be criminal—as is quite possible—or a criminal be lunatic, it is undoubtedly undesirable that the leaven of that terrible compound, criminality and lunacy, should be allowed to permeate the lunatic population which has not already been contaminated by criminality. It is important to distinguish between criminality, or the potentiality of crime, and crime itself. Much nonsense has been, and still is, talked by eminent scientists who do not make

this distinction, and consequently fail to discriminate between overt acts of law-breaking and the underlying state of mind which frequently, though by no means always, finds expression in crime. A "nature," or "mental constitution," or "moral character"—call it what you please—may be criminal and never bear fruit in overt acts against the moral or legal code of society. We are speaking of what religionists designate "the depravity of human nature." Of that science can have no knowledge, except as a fault of development. What we mean is a bias towards the gratification of passions and desires on purely selfish impulses, and in defiance of gregarious or social rules and considerations. We say that this bias may exist in a very high degree, and yet be held in abeyance by motives of interest or fear; or perhaps there may be disabilities of a mental sort—for example, lack of will power and purpose or downright stupidity—which prevent this criminality from bearing fruit in crime. What we want to make clear is that this potentially criminal selfishness, which is the germ of crime, is not *morbid*, and has nothing whatever to do with "mental disease" properly so-called; and those who confound the two things do discredit to common sense and detract from the *social* value of medical science by making it unpractical. We deny that it is scientific to class all departures from what is conceived to be the normal type of sane humanity as insane. There are many variations, whether of insufficiency or excess in development, which make men either "brutal" or "angelic" in their natures, that are not in any scientific sense faults or unsound. Monsters, both giants and dwarfs, in "mind" so-called, as well as in body, may exist without disease. The cannibal or earthman is not a lunatic, nor is the highly-developed theosophist or spiritualist necessarily insane. Meanwhile it is possible that the subject of an exceptionally variant nature may be both potentially criminal and insane, and when these two qualities coexist in the same individual, the compound is not simply noxious, but pestilent. It seems to put on specially vicious characteristics, and to originate a poisonous principle by which the weak nature with which it is brought in contact may be contaminated and debased. A little leaven leaveneth the whole lump, and it is inimical to the well-being of society that the criminally insane, or the insanely criminal, should be allowed to go at large, even though they may chance to be what is termed "harmless."

Provision ought unquestionably to be made for the safe custody of criminal lunatics of all classes apart from the non-criminal insane. It is in the last degree impolitic to incur the risk of creating the pestilent compound of potential criminality and mental unsoundness, to which we have just alluded, by discharging prisoners who have either become insane since the commission of the crime for which they were imprisoned, or were of unsound mind previously, into the ordinary asylums of the country. It is no true economy to spare the expense of providing special accommodation for "criminal lunatics," at the contingent cost of that contamination which must ensue when the weakly-minded, and therefore presumably susceptible, asylum population is exposed to the influence of natures which are both criminal and insane. It is to persons of this class that such suggestive remarks are made in the wards of asylums as—"If you were to kill him they couldn't do anything to you, because you are insane," or "The knives are blunted that you may not cut anyone's throat with them." Professor SHEPPARD, of King's College, long ago drew attention to the large proportion of persons in whom there is a minimum of insanity with a maximum of vice or criminality. It is a fact that much mischief is being done by the leaven of criminality in the insane population, and the matter is one to which the attention of our legislators ought to be directed without longer delay.

THE anti-vaccinationists of Leicester are greatly discomfited. The simple facts disclosed by our Commissioner, that vaccination and revaccination are the front line of defence in Leicester, as in every other place, against a disease which apart from vaccination mocks the most perfect sanitation, have acted like a bombshell on those who claim the liberty to have small-pox and to give it to others. Mr. BIGGS especially seems to wince under the publication of facts which so convict him of inaccuracy as a historian when he penned his famous sentence that no fewer than twenty-four importations had been stamped out in Leicester "by *sanitary measures alone*," omitting the information to the public that all officials were revaccinated, and that persons exposed to the patients were at once revaccinated by the Leicester authorities. Other writers of Mr. BIGGS's school make no attempt to invalidate our Commissioner's statement; Mr. BIGGS does. But he leaves the facts essentially where our Commissioner left them. He does not deny that the officials generally are protected by vaccination and revaccination, though he has been told by someone that the matron is an exception. We shall require some explicit particulars of the matron's case before attaching any importance to Mr. BIGGS's alleged exception, which does not invalidate the rule of practice at Leicester. Even Mr. BIGGS does not deny that the matron is vaccinated. She may even have been revaccinated, too. But she is not an unprotected person, like the hapless babies that to the number of 2000 a year are accumulating in Leicester. We have, by the way, before us another proof of the carelessness of Mr. BIGGS's statements. In his letter to the press Mr. BIGGS allowed himself to say, and to glory in the supposed fact, that there were only thirty-nine vaccinations by private practitioners in Leicester in 1886. The argument was that the intelligence of Leicester was losing its faith in vaccination. A return by the clerk to the guardians states explicitly in a note that of the 598 vaccinations in Leicester in 1886, 344 were done by private practitioners. Mr. BIGGS quotes the late medical officer of health as saying that he would undertake to stamp out small-pox without recourse to vaccination. He does not contradict the statement that this gentleman is revaccinated. He even tells us that he is an ardent advocate of vaccination. We leave Mr. BIGGS any consolation he can get out of the facts concerning the late medical officer of health's speculative views—a protected person and an ardent advocate of vaccination. We attach more importance to his example of guarding himself by vaccination and revaccination. Does the present medical officer of health help him? Let the public remember that our Commissioner's statements are

based on information received from the medical officers of health, past and present, who know what is done better than does Mr. BIGGS, and that Mr. BIGGS himself does not pretend to adduce any contradiction from them of our main statements. The last report of the medical officer of health, published since our Commissioner's visit, and alluding to the Commissioner's visit, contains no contradiction, but a very practical recognition of his statements, with an actual illustration of the practice of revaccinating exposed persons. Mr. BIGGS says that all our statements and those of our Commissioner are based on the admission of a tramp and the revaccination of two paupers. Our Commissioner never mentioned the two paupers. Our proposition is that exposed persons, including the sanitary, medical, and nursing staff, and friends of the patients, are protected by vaccination and revaccination, and Mr. BIGGS does nothing to invalidate this statement. In another sentence of his letter to *The Times* he seems to attribute to Dr. CORY the belief that the safety of the 140,000 persons in Leicester depends upon the casual and perfunctory vaccination of two paupers. Neither Dr. CORY nor we hold any such opinion. Such safety as they have is due to vaccination primarily, but the population of Leicester are in a state of great danger, to be tested whenever they shall be exposed to the disease—as may happen in any casual train or place, or whenever the cordon of vaccinated persons is withdrawn in Leicester. It is nothing wonderful that when small-pox is kept out of their way people do not take it. Neither let Mr. BIGGS delude himself with the idea that we trust to vaccination alone. The great majority of the present generation are vaccinated. Many of them, as he says, take small-pox, but so mildly that only 9·37 per cent. of such die of the disease, against 45·2 per cent. of the unvaccinated. We trust to revaccination, and ask Mr. BIGGS to explain how it is that in the small-pox hospital at Highgate for the last fifty years the officials of the hospital have, thanks to revaccination, enjoyed absolute immunity, with the one exception of a temporary gardener, who, *refusing to be revaccinated*, took small-pox and died. There is no answer to such facts. Are we to be told of the things which follow vaccination? What about the things that follow small-pox? There is no proportion between the slight risks of vaccination and the certain risks of small-pox, as every intelligent inquirer must admit.

WE publish in another part of this impression an account of some important changes that have recently been made in the conditions under which the profession of medicine is exercised in Jamaica. The matter is one which does not by any means exclusively concern practitioners domiciled in the island. For many years past Jamaica has drawn its medical recruits principally from our schools, and the alterations to which we now draw attention, involving as they do the loss to the profession there of very substantial and very considerable advantages, mean, among other things, the closing of a possible career to many of our more promising young men. This is to be regretted on all hands. It is indeed true that the conditions of practice in the island may be insufficiently attractive now to the class of men who have heretofore looked in that direction, though it will still afford a refuge for those who are less qualified for the fiercer competitions of professional life. The better prizes go to the better men as a rule, and the lesser prizes to those of less desert. So far as it is a mere question of a market for professional services the difference is not great. If the more ambitious do not crowd into it, there is more scope for the less ambitious who do; and seeing that we are bound to have various degrees of attainment among the men who take medical qualifications, it is not altogether displeasing to find that there are consolations for the inferior men as well as rewards for the more brilliant. But this is the narrowest possible view. When we include a broader horizon and consider either the public interest of the colony itself, or that still larger public interest which is represented by the advance of scientific medicine, we find abundant cause for regret. The short facts are that the population of Jamaica is too sparse and poor over a large portion of the island to support a sufficient number of medical men. To meet this evil the Government has divided the country into medical districts, and, by means of subventions, has provided in every district the means of living for a local medical man. This practitioner has received an official appointment to which a small salary has been attached, confessedly by way of a retainer, his official duties being originally very light, and his principal task that of building up a private practice in the common interest of himself and the population specially confided to his care. These official duties have, however, grown gradually more and more onerous; and quite recently, in connexion with a reform of the Poor Law, the Legislature has cast so much unremunerated work upon the hands of its district medical officers as to threaten seriously to interfere with their private practice. It is abundantly plain that such a policy, both by its direct and its indirect effects, can only injure the Jamaican community. Even the work of poor relief, when arbitrarily and unjustly imposed upon unwilling hands, is apt, we fear, to be grudgingly performed. Still that, no doubt, will be done. What is far more serious is that the work of tending the sick who are not also indigent must be more or less neglected. The philanthropic work of ministering to the wants of the "disinherited" is of itself a noble task, and one eminently fit to be the care of Government and singularly congenial to professors of the healing art. But it is obvious that in a country circumstanced as is Jamaica there are claims paramount even to those of the sick pauper class—the claims, namely, of the sick, without distinction of social status. In sacrificing these larger claims to the smaller the Legislature of Jamaica is, in our judgment, committing a grave mistake, which we trust they will have the wisdom to discover and the candour to acknowledge in the practical way of rectification.

Of the injustice involved in the casting of public burdens on to the shoulders of one class we do not speak at length. The point is too plain to need elucidation, and where the sources of indignation lie so near the surface it is pleasanter at least, perhaps even safer, to pass with a light and hurrying tread. We rather choose to remark, in conclusion, that the indirect loss to Jamaica of the more capable men whom a liberal policy would attract to her shores is a heavy price to pay for the pettifogging economies of the new Poor Law. Isolated and daily face to face with grave medical problems, the district medical practitioner, to

be fully equal to his responsibilities, should be chosen from among the most accomplished of his class. To such the field for practical and scientific achievement is illimitable. But opportunities are thrown away upon inferior men, and from this class the medical staff of Jamaica will assuredly be recruited unless by a return to more liberal and more equitable administration the Colonial Government succeeds in re-establishing good relations with the local medical profession.

Annotations.

"Ne quid nimis."

THE LATE MR. RICHARD QUAIN AND UNIVERSITY COLLEGE.

THE late eminent surgeon by his will, dated Aug. 5th, 1887, has bequeathed almost the whole of his fortune, amounting to about £75,000, to University College, London, subject to certain annuities to family connexions. The trustees—Lord Justice Fry, Sir William Jenner, the Warden of Merton, and Sir George Young—"are to apply the annual income in the promotion and encouragement, in connexion with University College, London, of general education in modern languages (especially the English language and composition in that language) and in natural science." It has been suggested by contemporaries that this affords an excellent opportunity for endowing London with a Teaching University, but it is obvious that the testator intended his munificent gift for University College, and for that College only. A large discretion is given to the trustees, but there can be no doubt that the wishes of Mr. Quain will be scrupulously carried out; and his suggestions for the benefit of the teacher and the pupil, "paying those who teach by salaries or other payments, as by endowing professorships," and "by pecuniary aid to those who are being taught, as by endowing scholarships and fellowships," are sure to have precedence in consideration.

DISCUSSION ON BILIARY CALCULUS AT THE MEXICAN ACADEMY.

AT a recent session of the Mexican Academy of Medicine, Señor Lavista reported an operation which he had performed on a case of enlarged and suppurating gall-bladder containing a considerable quantity of biliary calculi. The opening was made parallel to the border of the ribs, at a distance of two centimetres below it. The gall-bladder was laid open after being stitched to the abdominal parietes. The walls were found to be coated by a pseudo-membranous deposit of fibrin, in which the calculi were encysted. The cavity was scraped out, and it was then found to present three diverticula, one directed downwards, one towards the epigastrium, and another backwards, extending as far as the posterior border of the liver. Through this last the inner surfaces of the ninth, tenth, and eleventh ribs could be easily reached. Two drainage tubes were inserted into the wound and antiseptic dressing applied. At another session of the Academy a discussion arose out of the papers of Señor Lavista and Dr. Morales Pereira (see THE LANCET, October 1st, 1887) regarding the medicinal treatment of gall-stones, which, according to the President, Dr. Soriano, is an affection peculiarly common in Mexico, and for which he had been in the habit of using Durand's mixture (sulphuric ether and turpentine), but for which *simonillo* and *doradilla* (cotarach) enjoyed a considerable reputation. Señor Penafiel said that he had had no experience of the plants mentioned, but that he had seen another Mexican plant, the *Kalea sacachiche*, employed with great benefit in the case of an inhabitant of Pachuca who had suffered from biliary calculus. This drug had caused the expulsion of a large number of gall-stones and cured the patient completely. Dr. Soriano stated that a medical friend who suffered frequently from symptoms of hepatic calculi, which sometimes set up true hepatitis, having tried various methods of treatment, had latterly adopted that of the *simonillo*, which had caused him to pass several calculi, since which time he had been quite well. He had, however, continued to take the drug. On being interrogated as to the manner in which the *Kalea sacachiche* acted on the gall-stones, whether by disintegration or solution, Señor Penafiel replied that it was impossible to say, the patient had passed two or three tablespoonfuls of pear-shaped grains, which were red by transmitted light and violet by reflected light. After passing these the patient recovered completely, and had had no return. In another case he had seen, the calculi were large and cigar-shaped, and were passed during, and apparently on account of anæsthesia.

PROFESSOR VON LANGENBECK.

WE regret to record the death on the 30th ult., in the seventy-seventh year of his age, of the celebrated German surgeon, Professor von Langenbeck. The following is a brief summary of the career of our late illustrious *confrère*:—

Bernhard Rudolph Konrad von Langenbeck was born in 1810 at Horneburg. He studied at Göttingen, and graduated in 1835 with the dissertation, "De Retinæ Structurâ Penitiore." Soon after he published his essay on the "Origin of Venous Cancer and the Possibility of Transferring Cancer from Man to Animals." He then became Extraordinary Professor in Göttingen, and wrote an essay on "Persistent Spasm of the Fingers and the Application of Division of Muscle and Tendon in its Treatment." He then busied himself with the questions of "Stammering and the Employment of Myotomy in Defects of Speech arising from Spasm," and the "Immediate Union of Wounds by Exclusion of Air." In 1842 he became Professor of Surgery and Director of the Friedrichs Hospital. In 1848 he was Director-General of the army of the Duchies against Denmark; and in 1847, after Dieffenbach's death, he was appointed Director of the Clinical Institute for Surgery and Ophthalmic Surgery. Amongst other essays of minor importance are the following: "Subcutaneous Osteotomy"; "The Permanent Warm Water Bath in the Treatment of Large Wounds, especially of the Stumps after Amputation"; "On the Extirpation of Interstitial Uterine Fibroids"; "The Osteoplastic Resection of the Upper Jaw"; "Essays on the Surgical Pathology of Veins"; "On Cleft Palate"; "On Resection of the Ankle in Gunshot Wounds"; "On Gunshot Wounds of the Joints"; "On the Terminations of Resection Operations in War"; "On Extirpation of the Pharynx"; "On Gummatous Tumours." Professor Langenbeck has of late years lived in Wiesbaden.

SMOKE NUISANCE ABATEMENT.

COPIOUS details are given in the Chief Commissioner's Report of the work of the Metropolitan Police during 1886 under the Smoke Abatement Acts. The total number of cases in which proceedings have been taken has shown a gradual falling off for some years past, and the record of 1886 is marked by the same feature. This is probably in large measure due to the continually increasing use of smokeless fuel, such as gas and gas coke, or of hydraulic power. In this way the progress of invention is doing much more to rid the metropolis of the nuisance of its smoke than the Abatement Acts. Indeed, it would seem as if these statutes, weak as they undoubtedly are, have never yet had a fair chance, for, again, the smallness and irregularity of the fines inflicted where convictions have been obtained are made the subject of remark by the Com-

missioners. The average fine was in 1886 smaller even than in the previous year, and amounted only to £1 17*s.* 5*d.* Even making a liberal allowance for costs, this does not seem to be a large price to pay for the privilege of persistently annoying a populous neighbourhood. It were much to be desired that the metropolitan magistrates took more to heart considerations of the public health. Bakers and confectioners are very useful people in their way, and deserving of all respect; but we are at a loss to understand why, when by outrageously unscientific methods of manufacture they bring themselves within the magisterial jurisdiction, they should be let off easily. No doubt their services are highly necessary to the public weal, and for that very reason they should be the more carefully taught to consider the public weal at every point in their operations.

INTESTINAL SURGERY.

A REMARKABLE paper on Intestinal Surgery was read at the General Surgical Section of the International Medical Congress at Washington on Sept. 5th by Dr. N. Senn, a synopsis of which is given on another page of our present issue. It is interesting to learn thus early a new method of dealing with perforating gunshot wounds of the intestine by omental grafting, with and without scarification of the serous surfaces. This he calls—(1) the "adhesion" experiment; (2) ileo-colostomy in intussusception or intestinal obstruction, by opening the bowel above and below and bringing the artificial openings in apposition with decalcified bone plates; (3) enterorrhaphy, or the rubber ring method without the omental flap, when excision of bowel is necessary for gangrene—as in hernia, for example. This mode of dealing with the bowel consists in bringing the healthy ends of the intestinal tube together by means of a circular india-rubber ferrule or tube, made easily out of a piece of thin Martin's rubber bandage about an inch long, inserted into each end of the bowel, and the serous surfaces sewn together round this tube on the outside. Dr. Senn claims for the operation that in dogs it is a matter of little consequence whether three inches or three feet of intestine are removed. His results have been obtained chiefly on dogs, and the specimens shewn at the Congress by him were, we are informed, handed over by him to Mr. H. W. Freeman of Bath, who has brought them with him to Europe. These specimens were procured from dogs killed at the end of a fortnight, and show a perfect union in each case. The omental grafting effectually prevents all escape from the intestine into the peritoneal cavity. After forty-eight hours' application the omentum is placed as a band around the gut that has been perforated, and the ends sewn together only to the mesentery. Mr. Freeman writes to us that he will be happy to show these specimens.

GOVERNMENT COPYRIGHT.

A TREASURY Minute has just been published defining the Government claim of copyright in official publications. The official view is that literary or *quasi*-literary matter—e.g., the reports of the *Challenger* expedition, the Rolls publications, and other similar works, also charts and Ordnance maps—should be made the subject of a Government monopoly of reproduction. The reasoning by which this conclusion is supported upon public grounds is interesting and specious, if not quite convincing. "Unless," say the Lords of the Treasury, "copyright is enforced, cheap copies of the works or of the popular portion of them, can be produced by private publishers, who reap the profit at the expense of the taxpayer. And as such works are in any case a burden on the taxpayer, the greater the burden the fewer works can the Government, with justice to the taxpayer, undertake." Whence the conclusion is drawn that in the case of works of this class copyright should be enforced "in the interests of the taxpayer and of literature and science." It may freely be admitted that as a mere matter of arithmetic the proposition thus generalised is unassailable. But the arithmetical view of this subject is a very incomplete one, and it will, we think, be a matter of much regret to all who have the interests of science at heart that this very mercenary view should have prevailed. The publication of the "most popular parts" of a scientific report means the publication of the short result and summary of the whole, and there can, we take it, be no question that in the interests of science such publications are greatly to be desired. If the authentic statement of a generally interesting fact is denied except on the condition of purchase with it of a mass of detail and of evidence which the majority of readers have neither time nor inclination to digest, the sure result will be that paraphrase will take the place of republication. In that case the Treasury will probably realise—well, just what it would have realised from the sale of the original work in any case; and science will lose the benefit of the accuracy in statement which is the very crown and efflorescence of scientific writing. While, therefore, the new system appears to us well calculated to sacrifice the benefits of unrestricted publication, it seems as ill-adapted to secure the pecuniary advantages which afford its theoretical justification. Even were this not so, we should feel bound to protest against the injury done to science by the adoption at the Treasury of the maxims of the shop; as it is, we feel that our protest need be guarded by no saving of the illusory interests of the taxpayer to which "my Lords" appeal.

PHYSIOLOGY OF SHORTHAND.

A PAPER on the Physiology of Shorthand Writing, by Dr. Gowers, excited considerable interest at the recent Shorthand Congress. Shorthand is only a variety of writing, and the paper was therefore mainly occupied with an account of the cerebral physiology of writing. The chief points in the physiology of the brain relating to the act of writing were first described. It was explained that the arm-centre of the cortex is merely concerned in producing the movements for the written symbols, and that the word-processes are arranged in the motor speech-centre on the left side, as is shown by the fact that disease of this centre abolishes the power of writing as well as of speech. Thus in the work of the reporter, as far as is at present known, there is no direct transfer of the nerve-processes from the auditory to the arm-centre; they must go through the motor speech-centre. The fact that it is the activity of the latter centre which excites the arm-centre and the movements for the written symbols, affords a strong theoretical justification for the phonetic element in shorthand, in which the written symbols are uniform for the same speech-processes. The non-phonetic systems, in so far as they do not adopt the phonetic principle, proceed on a resymbolising of the ordinary longhand signs; there are two steps to the process, whereas in the phonetic systems the symbols replace the longhand signs, and are placed at once on their permanent footing in direct relation to the speech-processes. No doubt, however, the practical difference is less than appears from theoretical considerations, because in all systems the shorthand symbols ultimately stand in very close relation to the word processes, and are produced without any consciousness of intermediate steps. It was pointed out that the term "phonography," applied to the "phonetic shorthand," is not strictly accurate, since it is the speech-process, and not the auditory impression, that immediately excites, and is symbolised by, the written sign. It is really "speech-writing," not "sound-writing." The error is not great, however, because the speech-process and

the auditory process are in perfect correspondence. The curious fact was mentioned that many persons, perhaps all persons, read by means of the motor speech-centre, so that if this is destroyed the power of reading is lost, and illiterate persons actually move the lips in reading. This affords another justification for the phonetic principle—i.e., for the uniformity of relation between the written symbols and the motor processes. The paper concluded with some remarks on the muscular mechanism of writing.

SMALL-POX AND VACCINATION.

MR. WILLIAM TEBB, well-known as an anti-vaccinationist, quotes, in a letter to *The Times*, a portion of an article which appeared in our columns over sixteen years ago, and uses it to help him in his argument that vaccination is no protection against small-pox. He refers to our statement that over 10,000 lives had, up to the date of our writing, been sacrificed in England and Wales to small-pox during the epidemic year of 1871, and that 73 per cent. of the admissions into London small-pox hospitals had been amongst vaccinated people. He refrains, however, from adding that our article showed also the exceptional virulence of small-pox on the revaccinated as compared with the vaccinated, [and he ignores the fact that a primary vaccination in infancy is not held to have the power to afford complete protection against small-pox in after years, and this especially when those who have failed to secure revaccination find themselves in the midst of an epidemic which is essentially due to failure to secure the full protection of vaccination. Whilst investigations during the past ten years into the influence of vaccination have shown that the protective effect wears off, they have also abundantly proved how potent is the protection of a comparatively recent vaccination against small-pox. Any tendency to numerical increase in small-pox cases is amongst the adult classes, whereas the vaccinated infantile community, which in non-vaccination days suffered most, is practically exempt from the disease. In short, revaccination is as necessary as primary vaccination. The facts brought forward in the report of the Medical Officer of the Local Government Board for 1881 are very conclusive on the point of the protective power of vaccination as regards children. Thus, it is shown that of 55,000 children under ten years of age who had not been vaccinated, 782 died from small-pox that year; whereas the deaths amongst 861,000 vaccinated children were only 125. And these 125 included vaccinations giving every variety of evidence of protection—good, bad, and indifferent. And it is clear that if the 861,000 vaccinated children had died at the same rate as the 55,000 unvaccinated, an additional 12,000 small-pox deaths of children under ten years of age would have occurred in the metropolis that year, and that the immense saving of life effected was due to vaccination and nothing else.

DEATH THROUGH EATING WHELKS.

THE adjourned inquest concerning the death of a soldier named Smith was concluded at Colchester on October 1st. Since the death of the deceased, some three weeks ago, a chemical analysis of the stomach has been made by Dr. Dupré. No traces of poison were discovered. The jury returned a verdict to the effect that death was due to some undetermined poison contained in the whelks eaten by the deceased. We have not been furnished with a complete account of the symptoms shown by the deceased during his fatal illness, but a full inquiry failed to reveal any other known cause of death. Of course, it is just possible that the ingestion of the whelks and the death were facts simply in sequence, and not related one to the other as cause and effect. At the same time, too many cases have been recorded to lead one to doubt that there is something more than a mere coincidence. It may be, and probably is so, that the poisonous matter is developed with great intensity in certain instances, but it is not unlikely that the susceptibility to the action of the poison is more marked in some individuals than in others. It has been truly said that what is one man's meat is another man's poison. A wide field is open for investigation into these enigmatical causes of death, for we know but little or nothing concerning them. To elucidate the nature of the poison contained in some molluscs, whether the result of an elaborating life process or of post-mortem decomposition, both chemical analysis and physiological experiments are required.

THE INTERNATIONAL HYGIENE CONGRESS AT VIENNA.

THE cause of hygiene throughout Europe must be advanced greatly by the Congress which has just been held at Vienna. Part of the opening remarks of the Crown Prince were admirable, including those memorable words, "Man is the most precious capital of the State and of society in general; every individual life represents a certain value." It is satisfactory, too, to notice the important part in the discussions taken by our countrymen Sir Spencer Wells, Dr. Humphry, Mr. Shirley Murphy, Dr. Corfield, and others. Not the least pleasant incident of the Congress was the distinguished honour done to Sir Spencer Wells by a special banquet in honour of him by the surgeons and professors of Austria-Hungary. The only toast was "The Guest of the evening," Professor Breisky doing full justice to Sir Spencer and the great operation with which his name will ever be inseparably associated, which has added lustre to surgery, and years to the average duration of life. Sir Spencer made a reply at once genial and able, acknowledging early lessons in the School of Vienna, and branching off vigorously into the great subject of hygiene, of which he has become one of the most lucid expounders. He repeated the remarkable statement which he made last year: that in the last fifty years, in the reign of our present Sovereign, the average duration of human life has increased nineteen years—that is, from thirty to forty-nine years,—and this with very imperfect sanitary laws.

BOTHRIOCEPHALUS LATUS AND PERNICIOUS ANÆMIA.

IT may be remembered that last year Professor Runeberg advanced the view that "pernicious anæmia"—in some cases at least—was dependent on the presence of the intestinal tapeworm—Bothriocephalus latus. His contention was supported by Dr. Reyhen and others, but strongly opposed by such notable authorities upon the disease as Professors Biermer, Quincke, and Immermann. A case which tends to support Runeberg's view has been recorded by Dr. Schapiro (in "Wratsch," cited in *Centralbl. f. Bacteriolog.*, ii., 12). A lad thirteen years of age came under treatment for intense anæmia of a progressive type, characterised by great diminution of red corpuscles (viz., to one-sixth of normal) and of hæmoglobin, with liability to cutaneous hæmorrhage, epistaxis &c., marked cardio-vascular bruits, pyrexia, and without any emaciation. It was not until the administration of anthelmintics had resulted in the evacuation of a large quantity of segments of bothriocephalus (to such an amount that several worms were probably present) that he began to regain strength and colour. His recovery from that date was rapid. The writer attributed the anæmia to the disintegrating action on blood-corpuscles of some chemical product of the parasite which was absorbed into the blood.

THE SCARLET FEVER EPIDEMIC.

IN the week ending October 1st no less than 318 fresh scarlet fever patients were admitted into the hospitals of the Metropolitan Asylums Board. There remained 69 vacant beds in the urban hospitals, and as soon as the pavilions at Winchmore Hill can be furnished 160 more convalescents can be removed to that institution; but this only offered a prospect of 229 more beds, and day by day that number is diminishing by reason of the large number of cases stil coming in. It must also be remembered that the number of discharges for some time to come will be small; for, out of 1586 scarlet fever cases under treatment up to October 1st no less than 1329 had been admitted within six weeks and 800 within three weeks. In view of the rapidly approaching emergency, the managers asked the Local Government Board if they knew of any institution that was available, but they have answered that no workhouse or infirmary could, to their knowledge, be obtained. Under these circumstances a committee has been appointed to do the best they can, and at the same time to make progress in the erection of huts on the open spaces available at the existing hospitals. Dr. Bridges, representing the Local Government Board, congratulated the managers on having taken up the question of providing for convalescents; and, adverting to the contention that patients were kept in too long, he declared that in his visits to the hospitals during the past two months he had not seen a single patient who could properly have been discharged. He then raised an important point by expressing a hope that the managers would face the fact that they were the isolation authority for the metropolis, and that they would extend the number of their beds from 2000 to 3000. This was in accordance with the recommendation of the Royal Commission on Fever Hospitals; but that Commission further added that a reconstitution of the Board was needed. It is not Poor-law work to protect the public against infection, whether the infected are in receipt of Poor-law relief or not. It is essentially sanitary work, and since it will be impossible ever to call upon some forty different sanitary authorities to act independently in this matter, the sooner the managers are converted into a sanitary body by the weeding-out of much of the Poor-law element the better it will be for the metropolis. Such an arrangement will also in the end conduce to economy; for, whilst the expense must in either case be borne by the ratepayers, it is notorious that action by multiple bodies is the most extravagant of procedures.

FIRES IN THEATRES.

PROFESSOR JOHN MARSHALL, in a thoughtful letter to *The Times*, suggests that by structural arrangement the dangers of fires in theatres could be in some degree lessened in so far as the audience is concerned, and this quite independently of "the uncertain action of temporary contrivances, of agitated managers, and of momentarily paralysed assistants." Professor Marshall points out that as theatres are at present constructed the draught of air is always from the stage to the windows above or behind the gallery, and that when a fire breaks out, which it usually does upon the stage, the gallery serves, as it were, as a chimney to the fireplace, and its occupants are stifled by the products of combustion. He suggests that theatres should be constructed so that the draught should be in the opposite direction—viz., from the auditorium to a covered outlet in the roof above the stage, which he assumes is generally the highest part of the house. The ceiling of the auditorium must in this case be apse-shaped, sloping from behind the gallery upwards to a series of valved outlets (to prevent back draughts) placed above the proscenium. Mr. Marshall would, in fact, arrange the ventilation of his house on the model of a hop or malt kiln. This suggestion seems to us to be excellent, not only because the outlet for foul air is placed in the proper situation, but also because such a construction necessitates inlets for fresh air in the auditorium—inlets which, as theatres are at present constructed, are generally non-existent. The ventilation of theatres is scandalously neglected, and its neglect is a standing reproach to the architectural profession, which is sorely in need of some method for ensuring that those admitted to it shall be masters of at least the rudiments of natural science. There must also be other means of making theatres less dangerous than they now are. Few of us would regret the absence of a mass of flimsy and tawdry decorations which disfigures many of our theatres, and certainly increases the risk of fire. Surely, also, a great deal of the scenery might be rendered incombustible. Tin plate is nowadays almost as cheap as canvas, and we should have thought that with a very ordinary amount of ingenuity it might be made a suitable medium for the scenic painters' art. The use of the electric light is a step in the right direction, but of itself it only helps to diminish risk, and does not abolish the necessity of observing other precautions.

ENEMA LESIONS.

DR. ACHILLES NORDMANN, of Basle, has published a description of twenty-five bowel lesions due to the operation of administering enemata. They include three complete perforations and ulcers, and wounds of various depths and sizes. The causes of these lesions seem to have been the use of defective instruments, ignorance of the direction of the rectum, catching of the transverse fold on the tube, extreme irritation of the mucous membrane of the bowel, and obstructions caused by certain conditions of the uterus, the fœtal head, or an enlarged prostate. As a rule, these lesions are to be found on the anterior wall of the rectum, from one to seven centimetres from the anus. They are not always easy to diagnose, as other foreign bodies or caustics may produce similar appearances. Tubercular and hæmorrhoidal ulcers may be mistaken for them; these are, however, generally higher up. A perforating wound gives rise to paraproctitis, but this is not necessarily fatal, though a stricture generally results.

CHOLERA INTELLIGENCE.

THERE is some evidence that cholera is diminishing in Sicily. No returns now come from anywhere but Messina, and even these are irregular. During the week ending the 3rd inst. 175 cases and 115 deaths were reported, but in two days no returns were made. In Naples cholera still continues to cause mortality, but there is no tendency to an increase of the disease. The same may be said of Rome, where the cases have been largely of the sporadic type. From Malta we learn that the epidemic gives indications of dying out, but there were twenty deaths during the eight days ending October 3rd.

THE FORESTERS AND CONVALESCENT HOMES.

OUR contemporary, the *Observer*, says that the Midland Counties Courts of the Foresters are about to erect a Convalescent Home for their members, to be self-supporting. We wish the scheme all success. Our contemporary, in a sanguine spirit, goes on to suggest that the Foresters should not stop at convalescent homes, but go on to build hospitals (and of course maintain them) with such help as might be expected from large City companies and wealthy firms, into which their members or their wives and children might go in time of sickness. We cannot go quite so far as our contemporary here. It is not clear that hospitals could be raised in any such way as this, and they would inevitably

compete with and damage the existing hospitals, which certainly need no competition, and which have open doors for all real cases, whether the patient be a Forester or an Odd Fellow, or neither one nor the other. For the really destitute the workhouse hospitals already provide, and our existing hospitals are for the benefit of the class best represented by our friendly societies. All that is wanted is that they should organise larger subscriptions to existing hospitals.

FRENCH MILITARY SURGEONS AND PROFESSORSHIPS.

A SURGEON-MAJOR in the French Army, who is also an *agrégé*, or assistant professor of anatomy, lecturing at Lyons, was recently appointed by the Minister of Public Instruction to a chair at Lille, vacant by the death of the former occupant. Three days after the announcement of this appointment in the official journal a notification appeared in the same journal signed by the Minister of War, stating that this gentleman was ordered to Tonquin. Here, therefore, we have an officer in the army, who is at the same time an official under the Minister of Public Instruction, ordered by his two chiefs to be in two distant places at once. It would seem to us an absurdity for a military surgeon to take an appointment as a civilian professor at a provincial medical school; but in France it is not impossible, though apparently the Minister of War objects to it, and has determined to make it impossible, in this particular case at least. In a somewhat polemical article on the subject, a writer in a French medical journal complains that scientific eminence is rather at a discount in the medical department of the army, where the efficiency of a medical officer is reckoned far more from the reports of the colonel under whom he serves than from the scientific work he has done. It is also remarked that the Corps de Santé does not now attract the *élite* of the medical schools, and that the class of those entering the service cannot be expected to improve while so little encouragement is given to those who are desirous of extending their professional acquirements. The author thinks that it should be recognised that there are in the army, as in civil life, two classes of doctors, one suited for constant practice, the other susceptible of a higher degree of scientific culture. Let the first class be left with their regiments, and give the others the hospitals, allowing them to compete for the coveted distinction of *agrégation*.

THE TIME OF COMMENCEMENT OF MENSTRUATION.

DR. SULLIES finds from inquiries made from 3000 pregnant women from the neighbourhood of Königsberg that menstruation commenced at the mean age of sixteen. The taller and the weaker girls menstruated earlier than the shorter and the stronger girls, and the brunettes earlier than the blondes. The earliest of all were the tall, weakly blondes; the latest, the short brunettes of medium strength. In 83 per cent. the function was performed regularly at the first.

THE ROYAL BERKSHIRE HOSPITAL.

A COMMUNICATION has been made to Mr. Benyon, the vice-patron and President of the Royal Berkshire Hospital at Reading, of which Her Majesty is patroness, expressing, on the part of twenty-eight medical men in active practice in Berkshire and the adjacent parts of Bucks, Hants, Oxfordshire, and Surrey, a desire to see a Fellow, or at least a Member, of the College of Physicians of London established in Reading as a consulting physician in connexion with the hospital, at which there is now a vacancy. It is also stated that a feeling exists among the above-mentioned gentlemen that reforms are needed at the Royal Berkshire Hospital, if it is desired that they should continue to advise their poorer patients to seek the aid of the hospital to which their richer patients are subscribers. The governing authority of the Reading Hospital can scarcely ignore such an expression of views.

HYSTERO-EPILEPSY CURED BY A SHAM OPERATION.

DR. CHIARLEONI, believing that the good effects said to be produced by spaying on women suffering from the different forms of hysteria are to a large extent attributable to the mental and moral impression produced by the operation, determined to put this theory to the proof on the next suitable patient who came to his clinic. This happened to be a woman who, after a fright, had been affected by hystero-epilepsy, with more or less convulsive and paralytic symptoms. There was evidently no disease of the pelvic organs. She was subjected to a pretended ovariotomy, which, however, was merely an incision into the abdominal parietes, but was accompanied by all the paraphernalia of a true abdominal section, chloroform being of course given. This operation was followed by a complete cure; consequently Dr. Chiarleoni thinks that spaying should not be resorted to except in cases in which it is imperatively necessary.

MYELITIS FROM A HYDATID TUMOUR.

A RARE case of myelitis due to compression by a hydatid tumour is reported by Dr. Pedkoff in the *Meditsinskoe Obozrénie*. The patient was a young woman who had for some time noticed a tumour on the left side of her back. At first it gave her no trouble but when she applied for advice there was decided loss of power in the lower extremities. Afterwards the temperature rose and arthritic symptoms began to appear, simulating those of acute rheumatism. Paralysis both of motion and sensation, together with retention of urine and obstinate constipation, supervened. The tumour was then opened; a quantity of colourless liquid first came out, followed by a number of hydatids. The wound was left open, and in the course of a month something like 100 hydatids must have come away. The patient gradually became weaker, and died. Unfortunately no post-mortem could be obtained.

MEDICAL RELIEF AND DISFRANCHISEMENT.

THE *Liverpool Courier* reports that in the Registration Court all cases of simply medical relief were allowed, but that in a case where the claimant had been for three weeks in Brownlow Hill Hospital suffering from rheumatism, the vote was disallowed. The Barrister thought the statute did not include hospital treatment, excepting cases where the local authority used the parish hospital for infectious cases, to which the patient went, not from poverty, but for the sanitary advantage of the public.

MEDICINE AND SURGERY IN ENGLAND.

THE *Graphic*, in its issue of the 1st inst., contains a lengthy and interesting account of the rise and progress of the art and science of medicine and surgery in England—in other words, a history of the Royal Colleges of Physicians and Surgeons. An account is given of the foundation of these Colleges, the connexion with and separation from the Barbers' Guild, their vicissitudes of fortune, culminating in one instance in bankruptcy, and their gradual progress to their present state of authority and importance. The sketch is profusely illustrated, among the most noteworthy of the appeals to the eye being portraits of Linacre, Cains, and Harvey, and sketches of the old building of the College of

Physicians in Warwick-lane (now demolished), and the Court Room of the Barbers' Hall in Monkwell-street. Our contemporary in the same number also publishes collections of pictorial representations of "An Ambulance Class of Ladies," and "The Career of a Naval Surgeon at the Royal College, Haslar."

WILLIAM HARVEY.

As our readers are doubtless aware, next year will be the 260th anniversary of the publication of Harvey's immortal treatise "Exercitatio Anatomica de Motu Cordis et Sanguinis." In anticipation of the interest which this event will awaken, Mr. Richards of Holborn Viaduct has secured the copyright of a statuette of the famous physician by C. B. Birch, A.R.A., the sculptor, which, reproduced in terra cotta, aids materially in the adornment of the room in which it is placed, and serves to keep green the memory of one to whom the medical profession is so much indebted.

GASEOUS RECTAL INJECTIONS AND THE GLYCOGENIC FUNCTION OF THE LIVER.

MM. ARNOZAN and FERRÉ of Bordeaux communicated to the Toulouse Congress an interesting observation they had made with reference to gaseous rectal injections tending to show that sulphuretted hydrogen introduced into the animal economy in this manner arrests the glycogenic function of the liver. Three rabbits which had been subjected to these injections died, two of them in a short time, the third after a rapid and progressive emaciation. In all three the liver tissue was found to contain no sugar whatever.

THE ADVANTAGES OF NOTIFICATION OF INFECTIOUS DISEASES.

MEASLES having become fatally prevalent in Newcastle-upon-Tyne, Mr. Henry Armstrong has advised the Town Council to take steps for the tentative notification of this disease under the special act in operation in the borough. Only some half a dozen authorities have included measles in the list of diseases to be notified; but as the disease is so largely spread through the agency of elementary schools, and since there are now improved facilities for controlling such spread by the aid of the regulations under the Education Code, there may well be substantial grounds for the advice given. In Warrington measles is now being notified as a temporary measure, and the proposal with regard to Newcastle is that it should, in the first instance, be a notifiable disease for a period of five years. In giving his advice, Mr. Armstrong has set out materials for judging of the value of notification generally. In Newcastle this system came into operation under an Act passed during 1882; and since that date there have been some remarkable reductions in the fatality from certain infectious diseases. Thus, during the four years 1883 to 1886 the small-pox deaths have been 60, 12, 3, and none respectively; the typhus deaths were 24, 6, 7, and none; continued fever, 7, 3, 4, and none; and scarlet fever, 124, 156, 63, and 45. But, ignoring the fact that there has been no similar reduction in the case of enteric fever and diphtheria, we almost fear the time is premature for drawing anything like a definite conclusion from these results. Small-pox and typhus have always been, of all diseases, most amenable to immediate notification if followed at once by isolation; but even typhus reappeared in Newcastle this year. And as to scarlet fever, we know how its epidemic prevalences run in cycles, and it is to be presumed that the time for the next increase has, as yet, not come for Newcastle. In 1881, without notification, the deaths from this disease were only 7 more than in 1886, but then came a steady rise to 82, 124, and 156 in the three following years. We have no wish to imply that the admirable sanitary system organised in Newcastle will be unable, with the aid of notification, to cope with the next epidemic; but we cannot regard the experiment as having been continued for a sufficiently long time to have really proved that the reductions in mortality which have taken place are due to compulsory notification.

IS CANCER CONTAGIOUS?

M. DUPLOUY of Rochefort reports a case where a man, who had for a long time carefully nursed his wife, who was suffering from uterine cancer, became affected with epithelioma of the glans penis, necessitating amputation. The question arises, Is this a mere coincidence, or does it point to the possibility of cancer being transmitted by contagion?

THE MEDICAL SOCIETIES.

THE Clinical Society will hold its first meeting on Friday, Oct. 14th; the Pathological Society on Tuesday, Oct. 18th; the Ophthalmological Society on Thursday, Oct. 20th. The Obstetrical Society commenced on Wednesday last.

FROM the report of the results of analyses of the metropolitan water supply made by Dr. Frankland, and recently issued by the water examiner appointed under the Metropolis Water Act, 1871, it appears that during the month of August the Thames water distributed by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies was for river water exceptionally free from organic matter, the average proportion present being even less than in July. Of the water principally drawn from the river Lea, that supplied by the New River Company contained less organic matter than any of the other waters, excepting that of the Kent Company, whilst the East London Company's supply contained slightly more organic matter than the Thames waters. All the samples were clear and bright.

AT a debate which took place at the Oxford Local Board on Wednesday upon the report of Dr. Thorne Thorne and Mr. Gordon Smith relative to the sanitary condition of Oxford, and the comments which had been made thereon in the daily press, Mr. Omond, Bursar of St. John's College, moved the following resolution:—"That the board regrets that a memorandum conveying an erroneous impression of the matters in dispute should have been presented to the Local Government Board." After a short discussion the resolution was carried unanimously.

THE guardians of the parish of St. James, Westminster which is one of the parishes benefited by the Craven Charity, have applied to the hospitals which receive subscriptions from this fund to receive scarlet fever patients. Under the contract between the trustees of the Charity and the authorities of the hospitals, the latter can be compelled to take in a certain number of cases (infectious or otherwise, small-pox alone excepted), but this is the first occasion on which any demand has been made for the provision of acccommodation during an epidemic of fever.

THE inaugural address at the Midland Medical Society will be given by Dr. Sydney Ringer on Nov. 9th. The subject of the address will be, "The Antagonism of Drugs, and its bearing on the Administration of Medicine."

THE epidemic of diphtheria at Dorchester has assumed serious dimensions, and several deaths have occurred. Mr. Kendall, a highly respected practitioner, is lying seriously ill, having caught the infection whilst attending a patient.

MR. ALFRED EMSON, consulting-surgeon to the Dorset County Hospital, and one of the oldest practitioners in Dorset, died on the 5th inst. under melancholy circumstances. In February last, whilst performing an operation for cancer, Mr. Emson pricked his finger with one of his instruments. Blood poisoning set in, and, after months of suffering, death ensued from this cause. The deceased was seventy years old.

THE Cunard steamer *Aurania*, which arrived at Queenstown on the 2nd inst. from New York, brought details of the arrival at that city on the 22nd ult. of the Transatlantic liner *Alesia* from Marseilles with 364 passengers, sixteen of whom were then suffering from Asiatic cholera, eight others having died on the voyage and been buried at sea.

ON the 29th ult. the death occurred of Mr. Samuel Berry. The deceased, who retired from practice about five years ago, was formerly surgeon to the Queen's Hospital and Professor of Midwifery in the Queen's College, Birmingham. Mr. Berry was at the time of his decease in his eightieth year.

SIR GEORGE MACLEOD, M.D., Surgeon in Ordinary to the Queen in Scotland and Professor of Surgery in the University of Glasgow, has been appointed to succeed the late Dr. Fergus as Crown Representative for Scotland in the Medical Council. The appointment has our hearty approval.

THE Banbury Board of Guardians have resolved not to do their duty. By eighteen votes to ten they decided not to enforce compulsory vaccination. Are boards of guardians to make the laws of England? Or have they a discretionary power of throwing them into abeyance?

IN the Chancery Division, on the 5th inst., Mr. Justice Charles declined to grant an injunction restraining the Sheffield Corporation from erecting a small-pox convalescent hospital on some land situate near Totley Rise, Derbyshire, about five miles from Sheffield.

THE Lord Mayor for next year, Mr. Alderman Polydore De Keyser, is the grandson of a distinguished surgeon, and was himself intended for the same profession, an arrangement which was, however, set aside by the death of his brother in 1850.

THE death is announced of Dr. Lazarus Wittmann, *privat docent*, of Buda-Pesth.

THE ETIOLOGY AND TREATMENT OF SCARLATINA.

THE adjourned meeting of the Edinburgh Medico-Chirurgical Society for the discussion of the above subject was held on Wednesday evening, October 5th. The chair was occupied by Professor Grainger Stewart, President of the Society. Owing to the fact that the post-graduate courses are now in progress, there was a large attendance of visitors from a distance, in addition to the members of the Society. The President having opened the meeting, and referred to the discussion which took place in July, of which the present proceedings were the continuation, called upon Mr. A. W. Hare to read a second report now presented by the committee appointed to investigate and report upon the recent Edinburgh Researches into the Etiology of Scarlatina. The text of the report is as follows:—

SECOND INTERIM REPORT BY COMMITTEE.

Since submitting to the Society the preliminary report, your committee have further prosecuted the investigation of facts relating to Mr. Edington's paper on the Nature of the Contagium of Scarlet Fever. The committee have now collected a considerable amount of evidence bearing on the several points under consideration. While, however, the facts before them are of considerable importance, they do not as yet feel themselves in a position to present a final report. The following is a summary of their work:—

1. *Microscopical examination of the blood.*—Blood from ten typical cases of scarlatina, on or before the third day of the disease, was examined microscopically for the presence of micro-organisms. In this part of the investigations forty-four specimens were examined under the microscope, with the result that in the blood of one patient bacilli and micrococci were found, both in small numbers; in that of two patients bacilli and micrococci were found, the former in very small, the latter in moderate numbers; in that of four patients micrococci alone were found; and in the remaining three cases no micro-organisms could be detected.

2. *Cultivation experiments with the blood.*—The blood was taken from nine typical cases of the disease on or before the third day. In four of these cases bacilli and micrococci appeared in the culture material; in two micrococci alone; and in three a negative result was obtained. It is worthy of notice that the cases in which microscopic observation failed to discover micro-organisms only in one instance corresponded with those in which cultivation experiment failed. So that, taking the nineteen observations together, evidence of the existence of organisms was obtained in thirteen; or, taking the series of ten cases to which those observations refer, evidence of a positive nature was obtained in nine of them. The committee are not yet in a position to describe all these forms of microbes, but they are at present engaged in the investigation of the nature of the several organisms.

3. *Cultivation experiments with desquamation.* — One typical case was examined with negative results.

4. Several experiments were performed on calves with the "bacillus scarlatinæ" supplied by Mr. Edington. These consisted of an inoculation experiment by subcutaneous injection and scarification with this material, a feeding experiment with the same, and a combined feeding and inoculation experiment. In each case the result was negative.

5. In conjunction with Professor MacFadyean of the Royal Dick Veterinary College, to whom the thanks of the committee are due, three experiments were performed in which it was attempted to induce scarlatina in calves by injecting scarlatinal blood in two cases, and by feeding with desquamated scales in the third. The materials were from typical cases of the disease. These experiments also gave negative results.

6. The committee feel warranted in expressing their belief that the "bacillus scarlatinæ" of Edington is not, as suggested by some observers, the bacillus in eczema (Smith), the bacillus butyris, or the bacillus subtilis. They have, however, not yet been able to compare it with certain other forms of bacillus which it is said to resemble—e.g., the bacillus epidermidis, the bacillus of acute rheumatism (Mantle), and the bacillus found in the skin in erythema marginatum (Mantle).

7. They believe that they have definitely ascertained the fact that the micro-organism described by Mr. Edington under the name of "streptococcus rubiginosus," is morphologically identical with the "streptococcus scarlatinæ" of Dr. Klein. The value of this identification is emphasised by the facts as to inoculation experiments described by Mr. Edington in a letter appended to this report.

In conclusion, your committee beg to state: (1) That they find that an organism resembling that described by Mr. Edington as "bacillus scarlatinæ" is in a certain proportion of cases present in the blood taken with due precautions from scarlatinal patients. (2) That they believe that the streptococcus scarlatinæ of Klein is identical with the streptococcus rubiginosus of Edington. (3) That they have as yet failed to corroborate the conclusions arrived at by Mr. Edington as to the pathogenetic value of the bacillus scarlatinæ.

The committee desire to obtain the sanction of the Society to continue the investigation, particularly as regards (*a*) the morphology of the several organisms; (*b*) the susceptibility of various animals to infection with scarlatinal blood and with the various organisms; their investigations so far

having led them to doubt whether calves are susceptible to the action of human scarlatinal poison. They have therefore to ask the sanction of the Society for such further expenditure as this fresh line of experimentation may demand. Subjoined is a letter, with enclosure, which has been received from Mr. Edington, to which reference was made in the report and which the committee deem of such importance as to place before the Society *in extenso*.

(Signed) T. GRAINGER STEWART, Convener.
JAMES CARMICHAEL.
G. SIMS WOODHEAD.
ROB. W. PHILIP.
ARTHUR W. HARE.

ADDENDUM.

[COPY.]

44, Great King-street, Edinburgh, October 3rd, 1887.

DEAR SIR,—I herewith send you a letter received by me from Dr. Boswell Park, M.D., Professor of Surgery, Medical Department, University of Buffalo, together with microscopic preparations which accompanied it. The letter fully explains what they purport to be. Having carefully examined them, I am unable to see any distinctive difference in them from the bacillus which I have described, but I have intimated to him that these preparations of themselves are not sufficient to enable me to say that they are the same. You will, however, note that he states that cultivations in different media correspond with those described by me.

In response to your question as to my experimentation in man with scarlatinal material, I beg to say that, having inoculated a tube of gelatine with scarlatinal blood of the fourth day, I was successful, after thirty-six hours' incubation, in getting a profuse cultivation of streptococcus rubiginosus and diplococcus scarlatinæ sanguinis; and, having emptied half of it into some fresh milk, it was drunk by my brother. Three days later his blood, on being examined, showed micrococci, which, being cultivated, showed that the streptococcus rubiginosus was present. His temperature was carefully taken morning and evening for fourteen days, but never showed the slightest pyrexial rise. I might also state that he never has had scarlet fever. From this fact I doubt very much the pathogenicity of this organism in man. I am, dear Sir,

Yours respectfully,
(Signed) ALEXANDER EDINGTON.

Professor Grainger Stewart, M.D., Convener of Medico-Chirurgical Society's Committee for the Investigation of the "Bacillus scarlatinæ," &c.

[COPY.]

Buffalo, Aug. 24th, 1887.

DEAR SIR,—We have been very much interested in your papers on the Bacillus scarlatinæ, in Nos. 1380 and 1388 of the *British Medical Journal*, especially so because we have for the past fifteen months been cultivating a bacillus which seems to correspond with the one described by you. It was taken from the blood of a case of scarlatina when the eruption was well marked by puncturing the skin under due antiseptic precautions. It has been cultivated on gelatine, agar-agar, and potato, with the same characteristic growth detailed in your articles, and has seemed to be a comparatively pure culture from the start. Just now we have a beautiful potato cultivation undergoing the changes of colour you describe. The mounted specimens accompanying this letter were taken from it on the fifth and sixth days respectively. We have had no time to make inoculation experiments, or to study the bacillus carefully, and we are anxious to know whether it really corresponds to the bacillus found by you. Respectfully yours,

(Signed) BOSWELL PARK, M.D.,
Prof. of Surgery, Med. Dept., University of Buffalo.

Alexander Edington, M.B., C.M.

THE NATIONAL SOCIETY FOR AID TO SICK AND WOUNDED IN WAR (British Red Cross Society) has received from His Highness the Khedive of Egypt Bronze Stars in favour of the following gentlemen for their services, under the auspices of the Society, in aid of the sick and wounded in the Egyptian Campaign 1884–5–6:—Egypt: Commissioner John Smith Young, and Surgeon Edward Francis White. Soudan: Commissioner Sir V. H. B. Kennett Barrington, and Commissioner Sir Allen Young; Surgeons Chas. H. Newby, J. Edward Squire, F. C. H. Piggott, and Richard Lake; Professor Alexander Ogston.

HOSPITAL RÉUNIONS.

CHARING-CROSS HOSPITAL.

THE annual dinner of the past and present students of the above institution will take place on Friday, Oct. 14th, at the Holborn Restaurant, at 7.30 P.M. Chairman: A. Julius Pollock, Esq., M.D., F.R.C.P.

KING'S COLLEGE HOSPITAL.

THE old students' dinner took place at Limmer's Hotel on the 4th inst., at 7 P.M. W. Paul Swain, Esq., F.R.C.S., was in the chair, and he was supported by a large number of the medical staff and about eighty former students. The principal toast—"King's College and King's College Hospital"—was proposed by the Chairman and drunk with great enthusiasm. His student days under Fergusson, Budd, Todd, and Partridge were very feelingly referred to, as well as their successors—Beale, Henry Smith, and Wood,—who then held junior appointments. Dr. Wace, the Principal of King's College and the chairman of the Committee of Management of the hospital, in replying, pointed out that recently great changes in the sanitary arrangements of the hospital had been made, and that a new nursing school had been instituted. Surgeon-Major Partridge replied for the Services, whilst Dr. Playne, of Maidenhead, and Dr. Buzzard responded for country and town friends respectively. A very enjoyable evening was spent, and Dr. Hayes and Mr. Rose, the honorary secretaries, were congratulated on its success.

LONDON HOSPITAL.

THIS dinner was held in the New Library of the Medical College, and an opportunity was thus given to a large number of old London Hospital men to inspect the very handsome buildings that have taken the place of the old College. The chair was taken by Sir Andrew Clark, Bart. Nearly 200 friends and old students of the Hospital were present, and among them were the members of the medical staff, the lecturers at the College, the members of the College Board, and the chairman (Mr. Carr-Gomm) and the treasurer (Mr. T. H. Buxton) of the hospital. The guests included Deputy Surgeon-General Harris, Surgeon-Major Poole, Dr. Glover, Dr. Christie of Ealing, Dr. Robert Barnes, and others. Sir Andrew Clark, in proposing the toast of the evening, gave an account of the history of the College from its commencement, and of its remarkable development during the last few years. Mr. Treves proposed the toast of "The Army and Navy," Mr. Buxton and Mr. Corner those of the "Medical Staff" and of "The Hospital." Dr. Stephen Mackenzie, to whose energies the success of the dinner was largely due, proposed the toast of "The Old Students." Among the other speakers were Mr. Carr-Gomm, Mr. Couper, Dr. Sansom, Mr. Munro Scott, and Mr. Openshaw.

The band of the Coldstream Guards played a selection of music in the gallery during the evening.

ST. MARY'S HOSPITAL.

A DINNER was held on October 3rd in the grand hall of the Criterion, Mr. George P. Field, Dean of the Medical School, in the chair. Considerably over two hundred gentlemen were present, including Dr. Chambers, Dr. Downes, Dr. Lawrence, Professor J. E. Morgan, Dr. J. D. Maurice, Dr. Milner Moore, Surgeon-Major Myers, Dr. Platt, Dr. Owen Roberts, Mr. Spencer Smith, Dr. Danford Thomas, Surgeon-Major H. de Tatham, Mr. Worth, Dr. Handfield Jones, F.R.S., Sir Edward Sieveking, Dr. Broadbent, Dr. Cheadle, Dr. Lees, Dr. Braxton Hicks, F.R.S., Mr. Norton, Mr. Page, Mr. Malcolm Morris, &c. The usual loyal and patriotic toasts were given by the Chairman. In proposing the toast of "Success to St. Mary's Hospital Medical School," Mr. Field referred to the prosperous condition of the school and the steady progress it had made; the new entries, which for 1883 numbered thirty, had, during the four succeeding years, followed the satisfactory gradation of forty, fifty, sixty, and seventy, irrespectively of many students who had entered for special

classes and short courses. Mr. Field stated that the negotiations for the acquisition of property adjacent to the hospital were actively progressing, his remarks as to the probable early extension of the hospital into Praed-street being received with enthusiastic acclamation. The toast of "Past and Present Students of St. Mary's Hospital" was given by Dr. Braxton Hicks, and on behalf of past students was responded to in most felicitous terms by Professor Morgan of Manchester. Other toasts were given, and a highly successful gathering was brought to a close by the recitation of "Horatius" by Mr. William Terriss.

MIDDLESEX HOSPITAL.

IN the evening of Oct. 3rd, after the distribution of prizes at the hospital, a large number of past and present students dined together at the Holborn Restaurant, under the presidency of Mr. T. W. Nunn. After dinner the usual toasts were drunk, and speeches were made by Mr. Nunn, Major Ross, M.P., Brigade Surgeon Cayley, Surgeon-Major Hopkins, Mr. Morris, Mr. Lowne, Dr. Fowler, Mr. Hulke, Dr. Alderson, Mr. Vickery, Mr. Burdett, Mr. Wylde, Mr. Ganz, Mr. Smith Turner, and the Dean. Very excellent music was contributed by Mr. Ganz, Dr. Pringle, and Mr. Balfe. A message of greeting was sent from those present to Mr. Shaw, the only remaining member of the original teaching staff of 1835.

ST. THOMAS'S HOSPITAL.

ON the afternoon of Saturday the 1st inst., at 3 P.M., the usual inaugural address was delivered in one of the operating theatres of the hospital. The lecturer this year was Mr. R. W. Reid, Vice-Dean of the School and Lecturer on Anatomy. The theatre was crowded. The address (an abstract of which we publish at page 713) was listened to with much attention, only interrupted by frequent expressions of approbation on the part of the students. On the termination of the address there was a meeting of the staff, visitors, and students in the library. At 6.30 in the evening the annual dinner was held in the Governors' Hall, when about 120 past and present students assembled. The chair was taken by Sir W. Mac Cormac, and a most enjoyable evening was spent. After the usual loyal toast, the Chairman proposed "The Navy, Army and Reserve Forces"; this was responded to by Sir J. Watt Reid, K.C.B., for the Navy, and Sir Thomas Crawford, K.C.B., for the Army. Dr. John Harley proposed "The Visitors," which was replied to by Sir Henry Doulton, who referred to the unchecked advertising and large sale of infallible cures. Sir W. Mac Cormac proposed "The Health of St. Thomas's Hospital," to which Mr. Alderman Stone, the treasurer, replied, mentioning the mutual respect and friendship which existed between the medical staff and the governors. Sir John Simon, K.C.B., consulting surgeon to the hospital, proposed "The Health of the Chairman" with much feeling and eloquence, and Sir William Mac Cormac suitably replied. In the absence of Mr. Le Gros Clark, Dr. Alfred Carpenter proposed "The Medical School," and Mr. R. W. Reid responded. Dr. Stone, in a humorous speech, proposed "The Old Students," and Dr. Rosser (of Croydon) and Mr. Cresswell Rich (of Liverpool) replied, Dr. Bristowe, in the absence of Professor C. Stewart, proposed "The Secretaries" (Dr. Mackenzie and Mr. Battle), who briefly responded. During the dinner the band of the Coldstream Guards played a selection of music, which added much to the enjoyment of the evening. After the dinner songs were given by Mr. Caldicott and Mr. J. E. Nichol.

WESTMINSTER HOSPITAL MEDICAL CLUB.

THE annual dinner of the Westminster Hospital Medical Club was held on Monday, the 3rd inst., at the Holborn Restaurant, Mr. George Cowell, F.R.C.S., in the chair. Amongst those present were Sir Rutherford Alcock, K.C.B., Sir James Crichton Browne, Mr. Macnamara, Dr. Allchin, Dr. Sturges, Mr. Holthouse. Dr. Fincham, Dr. Donkin, Dr. Hall, Dr. Hughes Bennett, Mr. Cooke, Mr. Bond, Mr. Black, Dr. Sutherland, Mr. Quennell, and others, upwards of eighty having accepted. At this hospital, the staff and lecturers dine together every quarter and discuss subjects relating to the medical school, an example which might well be followed by other teaching bodies. A special tribute of praise was paid by the Chairman to Mr. Quennell, the indefatigable secretary of the hospital, for his courtesy and energy in carrying out the erection of the various grand stands to view the Jubilee procession, which brought in a large sum to the funds of the institution.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5475 births and 3097 deaths were registered during the week ending October 1st. The annual rate of mortality in these towns, which had steadily declined in the preceding seven weeks from 23·7 to 16·2, rose again last week to 17·5. During the thirteen weeks ending on 1st inst., the death-rate in these towns averaged 20·4 per 1000, and was 0·5 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 12·8 in Brighton, 14·8 in Portsmouth, 14·9 in Plymouth, and 15·4 in London. The rates in the other towns ranged upwards to 24·5 in Manchester, 25·7 in Halifax, 25·9 in Blackburn, and 31·6 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding nine weeks from 1301 to 440, rose again last week to 460; they included 168 from diarrhœa, 86 from scarlet fever, 62 from "fever" (principally enteric), 58 from whooping-cough, 39 from measles, 36 from diphtheria, and 11 from small-pox. These zymotic diseases caused the lowest death-rates last week in Sunderland, and Birkenhead; and the highest rates in Wolverhampton, Norwich, Preston, and Blackburn. The greatest mortality from diarrhœa was recorded in Cardiff, Wolverhampton, Norwich, and Blackburn; scarlet fever in Manchester, Oldham, Blackburn, and Preston; measles in Cardiff and Derby; and "fever" in Preston, Norwich, Leicester, Wolverhampton, and Salford. The 26 deaths from diphtheria in the twenty-eight towns included 20 in London, 3 in Huddersfield, and 2 in Newcastle-upon-Tyne. Small-pox caused 10 deaths in Sheffield and 1 in Bristol, but not one in Greater London or in any of the twenty-five other large towns. Only 2 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease; whereas the number of cases of scarlet fever in the Metropolitan Asylums Board hospitals and in the London Fever Hospital had increased to 1716. The deaths referred to diseases of the respiratory organs in London, which had been 142 and 160 in the preceding two weeks, further rose last week to 219, and were 1 below the corrected average. The causes of 81, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Nottingham, and in five other smaller towns. The largest proportions of uncertified deaths were recorded in Blackburn, Halifax, and Brighton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·4, 18·7, and 18·3 per 1000 in the preceding three weeks, further declined to 17·7 in the week ending October 1st; this rate exceeded, however, by 0·2 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 3·2 and 16·4 in Perth and Greenock, to 20·9 in Leith and 24·8 in Paisley. The 442 deaths in the eight towns last week showed a further decline of 15 from recently weekly numbers, and included 23 which were referred to whooping-cough, 17 to diarrhœa, 12 to scarlet fever, 11 to "fever" (typhus, enteric, or simple), 6 to diphtheria, and not one to small-pox; in all, 71 deaths resulted from these principal zymotic diseases, against 112, 106, and 78 in the preceding three weeks. These 71 deaths were equal to an annual rate of 2·8 per 1000, which exceeded by 0·2 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 40, 19, and 22 in the previous three weeks, rose again last week to 23, of which 8 occurred in Glasgow, 5 in Dundee, 5 in Greenock, and 4 in Aberdeen. The 17 deaths attributed to diarrhœa showed a further considerable decline from the numbers in recent weeks; they included 5 in Dundee, 4 in Edinburgh, 3 in Aberdeen, and

3 in Leith. The deaths from scarlet fever, which had been 17 and 11 in the previous two weeks, rose again last week to 12, of which 7 occurred in Dundee and 4 in Glasgow. The 11 deaths referred to "fever" corresponded with the number in the previous week; and included 5 in Glasgow, 2 in Dundee, and 2 in Leith. Of the 6 deaths from diphtheria, an increase of one upon the number in the previous week, 3 were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 77 and 62 in the preceding two weeks, rose last week to 83, and exceeded by 16 the number returned in the corresponding week of last year. The causes of 54, or more than 12 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 34·3 and 30·6 per 1000 in the preceding two weeks, was 30·9 in the week ending October 1st. During the thirteen weeks ending the 1st inst. the death-rate in the city averaged 31·0 per 1000, the mean rate during the same period being but 19·6 in London and 18·2 in Edinburgh. The 209 deaths in Dublin last week showed an increase of 2 upon the number in the previous week; they included 19 which were referred to diarrhœa, 13 to measles, 3 to whooping-cough, 1 to "fever" (typhus, enteric, or simple), 1 to scarlet fever, and not one either to small-pox or diphtheria. Thus the deaths resulting from these principal zymotic diseases, which had been 52 in each of the preceding two weeks, declined last week to 37; they were equal to an annual rate of 5·5 per 1000, the rate from the same diseases being but 2·1 in London and 1·4 in Edinburgh. The fatal cases of diarrhœa, which had been 35 and 37 in the previous two weeks, declined last week to 19, but were still considerably above the average for the season. The 13 deaths from measles exceeded the numbers in recent weeks, whereas those from scarlet fever showed a decline. The deaths of infants exceeded by 16, while those of elderly persons were fewer by 6 than the numbers in the previous week. Five inquest cases and 2 deaths from violence were registered; and 65, or nearly a third, of the deaths occurred in public institutions. The causes of 34, or more than 16 per cent. of the deaths registered during the week were not certified.

SMALL-POX MORTALITY IN THE GERMAN EMPIRE IN 1886.

A report on the mortality of small-pox in the German Empire in 1886 has recently been issued in Berlin, bearing the name of Dr. Rahts. It is shown that among the more than forty-seven millions of the population of the German Empire only 155 deaths from small-pox were registered during last year, being equal to a death-rate of 3·3 per million. In England and Wales, with a population of rather less than twenty-eight millions, the small-pox deaths last year were 275, equal to a rate of 9·9 per million. Of the 155 deaths from small-pox in the German Empire, 61 were of infants under one year of age, 14 of children aged between one year and five years, 16 of young persons aged between five and twenty years, and 64 were of adults aged upwards of twenty years. A table in the report gives an interesting comparison of the death-rates from small-pox in 1886 in the largest towns of several European States. In 193 towns of the German Empire the death-rate from small-pox last year was 4 per million living; in twenty-eight English towns it was 8 per million (not 77, as misprinted in the report); in seventy-one Belgium towns it was 194; in fifteen Swiss towns it was 218; in forty-nine Austrian towns it was 325; and in twelve Hungarian towns it was 2428 per million. There is good ground for believing that these small-pox rates bear a very definite relation to the efficiency of the regulations for securing general infant vaccination in the different countries. During 1886 no death from small-pox was recorded in Breslau, Dresden, Cologne, or Frankfort, and only one in Berlin; while the highest rates in the large German cities were 33 and 36 per million in Konigsburg and Hamburg. Among the principal European cities outside the German Empire the small-pox rate per million ranged from 6 in London, 49 in Liverpool, and 90 in Paris, to 1213 in Rheims, 1343 in Rome, 1538 in Geneva, 3687 in Buda-Pesth, and 5453 in Marseilles. It is evident that both England and Germany enjoyed in 1886 a comparative immunity from fatal small-pox, which affords a striking contrast to the mortality from the disease in France, Austria, and Italy.

Correspondence.

"Audi alteram partem."

"PROTECTIVE POWER OF VACCINATION."

To the Editors of THE LANCET.

SIRS,—In the letter you honoured me by publishing in your last week's journal (p. 681) I had written that men "require a theory as an aid in further work or as a goal or object *for it*"—instead of "first." Overleaf, in the fifth line, a note of interrogation, followed by a capital, cuts a sentence into two parts where only a comma was intended. May I ask for space to correct these points, and again to repeat that M. Pasteur's new theory needs for its confirmation the experiments suggested by Mr. Vincent Richards. This inquiry could not be entrusted to better hands than those of the accomplished secretary to the Hydrophobia Commission. When he returns from his well-merited and happy holiday, we may hope he will be induced to undertake it.

I am, Sirs, yours very truly,

Oct. 1st, 1887. WILLIAM SQUIRE, M.D.

To the Editors of THE LANCET.

SIRS,—Will you kindly allow me to correct an erroneous statement in Dr. Squire's letter, in your impression of the 1st inst., with regard to my predecessor Mr. Marson's practice as to the vaccination of the nurses and servants at this hospital. His usual custom was to vaccinate the nurses as soon as possible *after* their arrival at the institution, and preferably from arm to arm, either at the vaccination station here or at Blackfriars, and they were then sent on duty. The same practice has been continued at this hospital since Mr. Marson's resignation ten years ago, with equally good results. The disasters which occurred occasionally in the early days of the Asylums Board hospitals were, I venture to think, due to the use of lymph of a more or less inert character. When the medical officer of a small-pox hospital has any doubt as to the protective power of the vaccine lymph he is using, then certainly it is desirable that he should wait and ascertain the results of his vaccination before exposing his *employés* to the risk of infection.

I am, Sirs, yours faithfully,

HERBERT GOUDE, M.D.

Small-pox and Vaccination Hospital, Holloway, N., Oct. 5th, 1887.

To the Editors of THE LANCET.

SIRS,—Dr. Squire is mistaken in supposing that I questioned the experience that he referred to in regard to the protective power of vaccination after the infection of small-pox. I merely wrote for information, and gladly welcome any facts bearing upon the subject. I have not been able as yet to lay my hands on the London Asylums Board's Hospital Reports, but if the cases mentioned by Dr. Squire are all that are to be found there, few will think them sufficient to upset the whole former views, or to warrant the conclusion that vaccination under the circumstances is wholly useless. I do not suppose anyone says that vaccination will infallibly prevent small-pox if practised however early after infection, and it must be accounted rash to expose a person only just vaccinated to the infection of small-pox. But of its power to modify small-pox if practised early after infection, the facts are so numerous in its favour that it would take a great many adverse cases to subvert our faith in it. Much, I have no doubt, must depend upon the manner in which the vaccination is done, and the quality and quantity of the vaccine inserted.

I am, Sirs, yours faithfully,

Glasgow, Oct. 4th. HUGH THOMSON, M.D.

To the Editors of THE LANCET.

SIRS,—Permit me to comment upon Dr. Squire's letter on the above subject, which appears in this week's LANCET. Dr. Squire is correct in saying that the late Mr. Marson never received anyone for duty in the wards of the Small-pox Hospital "immediately upon vaccination, but waited for the result to be evident"; and, further, that he favoured

"the practice of vaccinating all in any house or room where small-pox happened." Dr. Squire, however, is, I believe, mistaken in supposing that Mr. Marson held that this latter operation secured complete immunity from the disease. I was an intimate friend and pupil of Mr. Marson, and know that from conviction he taught that vaccination would not procure immunity if the poison of small-pox had already gained admission to the system; he held that it might modify the intensity of the attack, but would not prevent it. This has always occurred to me as a difficulty in accepting Pasteur's plan of inoculation after a patient has been bitten by a rabid animal; and I cannot but think that Marson's experience of vaccination in small-pox militates against the adoption of Pasteur's views on the efficacy of inoculation after the introduction of the poison.

I remain, Sirs, your obedient servant,

Parkhurst-road, N., Oct. 1st, 1887. W. HENRY KESTEVEN.

SCARLET FEVER: PROPHYLAXIS AND TREATMENT.

To the Editors of THE LANCET.

SIRS,—The present epidemic of scarlet fever, which seems to be spreading over the country, induces me to ask you to allow me to bring before the profession generally a method of treatment which, in my hands, has proved an unqualified success, not only in overcoming the disease and in preventing those numerous sequelæ which are often more disastrous in their results than the disease itself, but, when applied to those who have not "incubated" the disease, acts as a remarkable prophylactic.

It is now some years since I first commenced to treat scarlet fever with carbolic acid. At first it did not appear to have any specially beneficent action, and my patients dying in about the same ratio as before, I gave up the use of it, returning to the old methods of treatment. After some little time, however, I returned to it, bringing more thought to bear upon the matter, being also more enlightened concerning the life of bacteria in general when placed under conditions which, if not inimical to life itself, at any rate had the effect of checking propagation and accepting as a foundation for treatment that the poison of scarlet fever was but the presence within the system of some, as yet unknown, species of bacteria, its severity being due to circumstances especially favouring development. I therefore commenced anew the administration of carbolic acid, with this difference, that the dose was considerably increased and its frequency doubled. The result, since I arrived at definite conclusions concerning the dose and its frequency, has been that even during severe epidemics I have never lost a patient, though I have treated now nearly 300 cases. Out of this number I have had but three cases of albuminuria, one of glandular suppuration; but no aural or nasal complications, no secondary fever or cardiac disease, and a rapid recovery from even severe cases that I have never before witnessed. I use liquid carbolic acid, specially prepared for internal use, and rendered liquid by the addition of 10 per cent. of water. In children from two to six years of age I order three minims in syrup of orange-peel and water, together about an ounce, and this must be given every two hours night and day for the first three days, longer if necessary, but if the patient is doing well, every three hours until the fourth or fifth day, then every four hours until all danger has past, and finally three times a day until perfectly convalescent. In older patients the dose should be four minims, and in adults even five or six. I have found eight minims (equal to over seven grains of pure carbolic acid) the maximum dose. Beyond that I should hesitate to push it, as at that dose nausea, griping, and diarrhœa result. Naturally, with an increased dose the menstruum must be proportionately increased, so as to do away with the rather hot acrid taste of the acid. It is, however, a matter of the utmost necessity that in the early stages the dose should be every two hours night and day, and the patient, if asleep, awakened to take it. It is in the frequency as well as in the dose that safety is found. Carbolic acid when introduced into the system is extremely "fugitive," entering into combination with wellnigh everything that it comes into contact with; hence the absolute necessity for its persistent frequent administration. An almost infallible test as to whether the dose and its frequency have been duly observed is to be found in the urine; in fact, I might also add whether the dose is sufficient. In the course of from twenty-four to thirty-six hours the urine begins to present a smoky hue, somewhat similar to that observed at the commencement of hæmaturia, and in time becomes almost black. The absence of this hue invariably indicates either that the frequency of administration has been curtailed or that the dose is not sufficiently large. I have never known it absent if even the dose has only been two minims, provided it has been administered every two hours. I never consider my patient safe until this peculiar hue is present, the deeper the better. That this peculiarity of the urinary secretion is not due to the blood I have practically demonstrated. It is, I am of opinion, the result of some peculiar combination of the carbolic acid with the products of renal excretion; for the urine is sometimes passed quite clear, but in the course of a short time assumes the characteristic hue. I consider this colour of the urine of the utmost importance, as only upon its appearance can we assume that the drug is thoroughly saturating the whole system; for so rapid is its excretion that when the carbolic acid is ordered to be given only every four hours, the tint disappears.

This, then, is the treatment that has proved so successful in my hands. But to be effective it must be commenced *ab initio*. It will not do to begin on the second or third day, and if failure ensue credit it to the treatment, though possibly even then it may prove better than the old system. I do not interfere with the ulcerated tonsils, which, so far as my experience goes, are invariably affected in scarlet fever. I look upon the extent of the ulceration as an indication of the severity of the attack, and increase the dose of the acid. Once only have I applied nitrate of silver solution, and this was in a strumous child where the whole of the fauces was coated in twenty-four hours with a diphtheritic exudation. The child recovered, but had glandular suppuration on both sides of the neck: the only case I have had. With reference to the three cases of albuminuria, all were clearly traceable to distinct causes. One patient ran out into the garden without a cap chasing a cat which had escaped from the nursery, a keen east wind prevailing at the time. A second sat before a broken window; whilst the third was similarly circumstanced. All these were sufficiently well to sit up, and in each case albuminuria occurred before the tenth day. All recovered.

Desquamation, as a rule, is neither so prolonged or so acute. I have had no occasion to again resort to cold baths to check excessive temperature, the highest record being 104·5°. Only twice have I had serious nervous disturbance, which was speedily subdued by large doses of bromide of potassium.

With reference to the administration of carbolic acid as a prophylactic, I have used it with the happiest results. I give to all the other inmates of the house who have never had scarlet fever, irrespective of age, one minim of the liquid carbolic acid three times a day, and I do not prohibit intercourse with the sick. The result has been that in a few instances—I think four—the disease has been taken but very slightly, whilst the large majority have escaped. That this immunity was due to the acid may be inferred because subsequently those exposed have been attacked severely but have recovered. In one case a second child was attacked five weeks after the first was well. The house had been disinfected by the municipal authorities. It was taken ill on a Friday with diarrhœa and vomiting, but being subject to bilious attacks little notice was taken of it; on Saturday it was dull and listless; it was seen at 7 o'clock on Sunday morning, and found in a state of collapse, and died five hours after from suppressed scarlet fever. Nevertheless, during the illness of the first child it was an inmate of the sick-room after the fourth day, but was preserved from attack by the daily doses of carbolic acid.

These few outlines I have hastily put together, and neither time nor space can be found to give details of the cases treated, interesting as they are. I would conclude therefore with these few words. Each case must be treated on its own merits. The treatment should be commenced the same hour that the case is diagnosed. The severer the case at its outset, the larger the dose. Well diluted and flavoured with tincture of orange-peel, the taste is not unpleasant. Extreme nervous excitement should be calmed with bromide of potassium, and extreme nervous depression with brandy and the usual adjuncts. Dismiss the idea that any harm can ensue from these doses of carbolic acid, but, when possible, patients should be seen at least twice a

day, to either increase or lessen the dose. If these views are carried out, the danger of scarlet fever will be reduced to a minimum, and those troublesome sequelæ, the dread hitherto of the practitioner, will rarely make their appearance.

I am, Sirs, yours, &c.,

ARTHUR WIGLESWORTH, L.R.C.P.L., &c.

Liverpool, Sept. 1887.

"THE DURATION OF SCARLET FEVER INFECTION."

To the Editors of THE LANCET.

SIRS,—Your annotation under the above heading in THE LANCET of Oct. 1st calls attention to a subject of great practical importance. The almost universally received opinion is that the infection lasts as long as desquamation continues, and that isolation of the patient is therefore necessary until the completion of that process. No doubt this was the correct and necessary practice in times past, but I question its necessity where the practice of disinfecting the patient's skin is thoroughly carried out. Unquestionably, the desquamating cuticle retains the infection longer than perhaps any other part of the body, but I have for a long time felt that if the skin is thoroughly anointed with carbolised or other disinfecting oil from an early period of the disease, and a daily bath containing some disinfectant be given as soon as the patient's condition will allow, he may with perfect safety be permitted to mix with others, even while peeling is actively going on. Acting on this belief, I have for some time back been in the habit of shortening the period of isolation without any evil result; and if this practice should, by a more extended experience, prove to be safe, the present congested condition of the hospitals of the Metropolitan Asylums Board might be much relieved.

I am, Sirs, yours faithfully,

Ludlow, Oct. 1st, 1887. MARK LONG, M.D.

JAMBUL IN DIABETES.

To the Editors of THE LANCET.

SIRS,—Since the publication of an abstract of my lectures on New Drugs in THE LANCET of Sept. 24th I have had many inquiries relative to my experience of jambul in diabetes. Would you permit me to answer them briefly in your columns?

First and foremost, the reason why I did not include jambul in my series was, not that I had found it *useless*, but that I was at the time of lecturing still accumulating results before pronouncing a definite opinion upon the drug. My experience is limited to surgical cases seen at the London and St. Peter's Hospital. They are as follows.

Diabetes insipidus.—No diminution of the urine with jambul.

Diabetes mellitus.—Cases presenting themselves with sloughing ulcers of diabetic origin, or accidental wounds in diabetics, refusing to heal under any application or treatment, gave these results: Water diminished; sugar decreased; ulcers filling in and wounds granulating and healing with surprising rapidity. Dose, 2½ gr. to 5 gr. in pelles thrice a day after food.

One case in point may be mentioned. A diabetic of eighteen months' standing, who had been lately under strict diabetic regimen and treatment, applied to me for relief of rapidly increasing sloughy ulcers of leg and thigh. These ulcers caused great pain. The patient stated that he filled a full-sized zinc pail with urine every night, and although he did not measure his urine in the day, he believed it was even greater in quantity. In one week with jambul (2½ gr. thrice daily) the urine diminished to one-half the quantity, and some of the deepest ulcers had filled up and skinned over. Few cases have impressed me so much with the value of jambul in diabetic ulceration as this.

I would seize this opportunity of saying that the New Therapeutical Society will be doing invaluable work if it devote some of its attention to the careful investigation and honest criticism of new drugs and remedies. Systematic and collective experience from the London hospitals alone would suffice in a few weeks to indicate worth, and to detect and reject much of the trash which is to be found in the mass of new remedies at present before the profession.

I remain, Sirs, yours truly,

Old Burlington-street. E. HURRY FENWICK.

"GAMALIEL IN WHITEHALL."

To the Editors of THE LANCET.

SIRS,—I have read your article of last week on Mr. Sclater-Booth's (I beg Lord Basing's pardon—"the king can do no wrong") invitation to the medical profession to disband themselves and to mistrust one another while trying to combat disease and death. You mention, without comment, Lord Basing's sneer at "Gamaliel in Whitehall." May I point out that a Hampshire squire might have read his Scriptures to the extent of learning what Gamaliel's teaching really was: "Let them alone," he says of those expounding truths which were new and possibly inconvenient to himself; "for if this counsel or this work be of men, it will come to nought; but if it be of God, ye cannot overthrow it." This would look like sensible advice—proceeding, indeed, upon the very lines that are commonly followed by the medical profession. It seems also to have come from a man who knew how to value facts above opinions, not from one who sought to decry advancing knowledge under cover of a hearsay phrase. I could wish it had been Lord Gamaliel who addressed the Sanitary Institute.

I am, Sirs, your obedient servant,

Oct. 3rd, 1887. WHITEHALL.

HEMIPLEGIA DURING THE PUERPERIUM.

To the Editors of THE LANCET.

SIRS,—In a conversation to-day with Dr. Finlayson regarding the case of hemiplegia during the puerperium, which is reported in the present issue of THE LANCET, he informed me that two apparently similar cases—that is of puerperal cerebral embolism without cardiac valvular disease—had been reported by himself. I find, on turning to the *Obstetrical Journal*, vol. vii., p. 666, that this is so, and that I have been wrong in supposing that my case was the first of the kind reported. Apart from the desire to correct this mistake, I am anxious, by referring to these cases of Dr. Finlayson's, to draw the attention of obstetricians further to this affection, which seems more common than is generally supposed; and it would be interesting to know to what extent such cases have occurred in the experience of your readers, or in the experience of others whose records they may have seen. I am, Sirs, yours faithfully,

Newton-terrace, Glasgow, Oct. 1st, 1887. SAMUEL SLOAN.

ACCOMMODATION FOR INFECTIOUS CASES: A SUGGESTION.

To the Editors of THE LANCET.

SIRS,—While there are to-day only eight beds in the fever hospitals available to meet the present epidemic, there are literally hundreds of beds standing empty at the general hospitals—two hundred at Guy's alone. If Guy's, for instance, would contract with the Asylums Board to take the enteric cases, that would relieve about a hundred beds. It would be thought undesirable to admit scarlet fever to special wards in general hospitals, but two of those with beds closed might combine, and, putting all their cases in one hospital, let the other to the Asylums Board. Anything is better than leaving the cases in their own homes, putting the unfortunate children in draughty sheds in November, or sending out the convalescents before they cease to be dangerous. I am, Sirs, yours &c.,

October 6th, 1887. X. Y. Z.

THE DRAINAGE OF BEXLEY HEATH.

To the Editors of THE LANCET.

SIRS,—A short time ago I came to this healthily situated place, and was surprised to see how sickly the children and people looked after seeing those at Putney, the place I had been living in. I now attribute it to the want of drainage. Here is a place of several thousand inhabitants using cesspools which drain through the soil into one another: the old garden closets would be perfect safety in comparison. Close to me there is a valley, and in its sides are seen the blackish leakage ultimately on its way to the Thames. Wells must also receive their share. The main drains of London are not far from us, and yet we will not

connect. Ought not places of large size be compelled to do so, or use garden closets? It is sad to see lovely Kent villages so polluted, and London children had better be kept there than sent near places of this kind for their health. The expense of clearing out cesspools is greater than the rates would be, so that only those who never empty theirs are money gainers by this dirty and dangerous system. Something in your journal might cause people here to make a stir or move the authorities to interfere on behalf of those who wish to breathe real air instead of that from hundreds of impure drain-holes. Will not the cholera, when it comes, seize upon places like this in preference to those where there is drainage or closets in the ground, with no water used? I am, Sirs, yours truly,

G. BLAKELEY, Commander R.N.

Bexley Heath, Kent, Oct. 3rd, 1887.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

To the Editors of THE LANCET.

SIRS,—It is proposed at our next Council meeting to take into consideration the Darlington scheme, which, if adopted by the central authority, will enable Boards of Guardians to fix and regulate as they choose the salaries of all their officers. As this is a matter which will seriously affect all Poor-law medical officers, it is absolutely necessary that they should be "up and doing," as no time must be lost, a memorial to the President of the Local Government Board having been sent by the Darlington guardians and a request from them to all Boards of Guardians throughout the country to do the same.

Hoping to receive communications upon the subject from all Poor-law medical officers,

I am, Sirs, yours truly,

J. WICKHAM BARNES.

3, Bolt-court, Fleet-street, London, Oct. 5th, 1887.

THE SIXTH INTERNATIONAL CONGRESS OF HYGIENE.

(From our Special Correspondent.)

Vienna, Oct. 2nd.

THE greatest International Congress of Hygiene that has ever been held has now completed its labours. It is somewhat too early to judge the wisdom of its resolutions; and, indeed, these are buried in such a maze of documents, reports, and speeches that no one has yet fully realised what has been done. It is impossible to be in all Sections at one and the same time; and, were this even possible, the confusion of languages often makes it difficult to follow the debates. In this respect the Congress has not been so well managed as its predecessors. In all former congresses French was recognised as the official language. Speeches in other languages were allowed, but on the condition that they were translated into French, and, of course, all resolutions and official documents were drawn up in French, and the votes taken in French. Thus, foreign delegates were kept together and were fully able to follow the proceedings.

Considering the immense preponderance of Austrian delegates and members present, some regulation should have been established on the present occasion to prevent their speaking too often. The Germans, who, as the nearest neighbours, were the next in numbers present, joined heartily with the Austrians in speaking German. Thus speech after speech was pronounced in German, a language which the great majority of the foreign delegates present could not understand. These were so badly translated that the foreigners soon ceased asking for such interpretations; and, in some Sections, no attempt whatsoever was made at translation. Therefore the majority of the foreign members were obliged to pass wearisome hours, without understanding a word of what had been said. The result was that after a little of this experience a great many went away. Vienna is an attractive town; there were many excursions organised, and the proportion of foreign delegates at the Congress became less and less numerous. Instead of sitting out all the meeting, and taking an active part in the debates, they would look in for a moment or two and then revert to the greater attractions of the Ringstrasse. For hours together I was the only Englishman present in the several Sections I attended. Thus the Congress, to a considerable extent, degenerated from an International Congress into an Austro-German Congress.

Even worse than this was the method of voting. Those present raised their hands for or against the various proposition without any attempt to analyse the vote and ascertain what it represented. Thus, on one occasion, in the First Section, the Baron de Suzor and myself were the only persons present to speak or vote for Russia and England. If we take the Indian Empire, the English colonies, and the Asiatic as well as the European dominions of Russia, it will be found that the interests of something like five hundred million souls only counted as two voices in a division against thirty or forty Viennese doctors, who at most represented one single town. Considering that any Austrian who chose to pay 16*s.* was admitted as a member of the Congress, it was preposterous to give to hundreds of unknown amateurs who have never studied hygiene the same voting power as the distinguished representatives of foreign governments and scientific societies. A national local congress could have told us what several hundred Viennese doctors have to say on various sanitary subjects. It was not necessary to bring delegates from all parts of the world to know what opinions prevailed at Vienna. What is wanted is the opinion of various nationalities on subjects of international interest. It would be most useful to record from time to time how this opinion develops itself; but if mere local majorities are to govern the decision of these congresses, there will be no sequence—they will alter according to each place where the congress meets, and will always exhibit contradiction. Thus, in Portugal the immense majority would be in favour of quarantines, and in England the result of the vote would be just the opposite. Evidently it is by nationalities that the vote should be taken. We want to know what nations are in favour of or against quarantines &c. The Austrians present should have had but one vote (however numerous they might have been), the Germans one vote, and so on for all nations. It is quite easy to call on the representatives of each nation to stand up and give their vote separately, and, when not agreed among themselves, the majority would govern, note being taken whether the vote was unanimous or not. The majority thus obtained would represent the opinion of the Congress—that is to say, a truly international opinion, and not, as at present, an Austrian vote with just a slight sprinkling of foreign elements. The as yet somewhat incomplete list printed sets forth that there were 2414 members of the Congress, and out of this number 1277 are marked as present. Now, of these members present, no less than 397 live in Vienna, and this does not include those who reside in the suburbs of Vienna. Thus, Vienna alone represents something like forty times the voting power of the entire British empire.

These criticisms are all the more necessary and important, as it is now decided, in response to an invitation of the British Sanitary Institute and the Association of the Medical Officers of Health, that the next International Congress of Hygiene shall be held in London. As the Universal Exhibition will draw most persons to Paris in 1889, it would be difficult to hold a Congress elsewhere that year; but, on the other hand, Paris has already been the seat of one Congress—namely, the Second International Congress of Hygiene. Consequently there will be a French Congress held in Paris in 1889, at which foreign representatives will not be obliged to attend, but where they will no doubt be heartily welcome if they choose to go. The Seventh International Congress of Hygiene will then follow in due course two years later—that is to say, in 1891,—and in London. In the meanwhile a committee has been elected to organise and prepare the International Congress, consisting of Dr. Brouardel for France, Dr. Dobroslavine for Russia, Dr. Billings for America, Professor F. de Gruber for Austria, Dr. Roth for Germany, Dr. Mosso for Italy, and Professor Corfield and Mr. Shirley Murphy for England. These gentlemen have agreed to meet at Dresden on the 10th of October next year to talk the matter over, and it is to be hoped that some arrangement will then be made to confer on the next Congress a more truly international and representative character.

In all other respects the present Congress has been a marvellous success. It would be difficult to find in all Europe a town better suited for a Congress than Vienna. The majesty of the buildings, the broad expanse of the thoroughfares, the splendid halls, restaurants, and meeting places all

combine to facilitate a brilliant reception; but, more than all, the innate amiability, the courtesy, the easy gracefulness of deportment which distinguish the Viennese population, make it alike a pleasure and an honour to be entertained by such a people. From the Crown Prince, who graciously received the members of the Congress at the Imperial Court, mixing and conversing freely with his guests, down to the humblest attendant at the University where the Congress met, all were alike animated with that spirit of amiability which leaves a lasting and most pleasant impression. The excursions to Semmering, to Kaiserbrunnen, and to many other places of interest near Vienna, were all admirably organised and successfully conducted. And now 400 members of the Congress start for Buda-Pesth in a special steamer, where they will be entertained for two days and shown many things of interest.

As for the actual work done by the Congress, the report of the speeches will fill more than one bulky volume. Nor is it easy to give the resolutions, for in some instances, instead of resolutions, the summary of long papers was adopted. These constitute little pamphlets of themselves; and if a Congress chooses to adopt a pamphlet instead of a resolution, it can scarcely expect the press to reproduce the pamphlet. This and other similar mistakes can only be attributed to the fact that a considerable proportion of the members belonged to countries where the freedom of meeting, of association, and of debate is to a great extent denied. They have not acquired the habit of self-government, and therefore do not know how to conduct meetings so as to produce the greatest influence on public authorities and on public opinion. While in some Sections the resolutions, or conclusions as they were sometimes called, were of impracticable length, in other Sections no resolutions whatever were put or discussed. Thus in Section 1, dealing with the question most germane to hygiene—viz., drainage,—no definite result was obtained. M. Durand Claye, the chief engineer of the Paris Ponts et Chaussées, presented a report on the Shone and Waring systems of drainage. It would be impossible to underrate the services rendered by M. Durant Claye. His energy is indefatigable. In all the Congresses he comes to preach the holy doctrine of cleanliness, of plenty of water, and plenty of air. In Paris, he has had the courage to attack vested interests, to defend poor and unprotected tenants in working-class districts against the sanitary delinquencies of jerry builders and rack-renters. But, in discussing the Shone system, he clearly showed that he knew but little about the subject. He objected to all separate systems, because the rain water washing down the gutter in the streets of towns contained as much organic matter and germ life as sewage itself. But, as M. Poutzen, who defended the Waring system, replied, it is not the quantity but the character of the germ which is of importance; and, as the germ of typhoid fever does not liquefy gelatine, its presence would not be shown in the analysis brought forward by M. Durand Claye. Many eminent sanitarians took part in the debate, and the opinion with regard to a separate system or canalisation for sewage proper was about evenly divided. With regard to the Shone system, it was pointed out that it was not necessarily a separate system. In the Houses of Commons it drained off the rain, and the rain occasionally amounted to forty times in volume the quantity of sewage proper. At Eastbourne, where the rainfall had recently been estimated at half an inch within an hour and a half, it also took all the rain-water. Nor was there any complicated machinery. The Shone apparatus for raising sewage to a higher level by pneumatic propulsion had been in work for six years at Eastbourne without any breakage, accident, or stoppage whatever occurring. The real question is that in many streets, localities, and towns there is not a sufficient fall for sewers. Hence the sewers are not self-cleansing. In many instances the sewers are much too large; there is therefore more room for the generation of sewer gas, and there are more deposits on the sides. Smaller sewers would be much cleaner; but, on the other hand, cause much more friction, and therefore require steeper gradients. These the topography of a town does not generally provide. They must be created artificially. When the sewage is too low down it must be lifted up, so that it may once more resume its course by the force of gravitation. Steam pumps, as a rule, take too much room, and are too expensive to be applied on a sufficiently extensive scale. It is in such cases that the Shone system, already employed in eighteen towns, renders great service. The case of Henley-on-Thames was cited, where, as compared with the expense of providing a steam-pump and ordinary sewers, an economy in the original outlay of 25 per cent. and in the yearly working expenses of 50 per cent. will be realised. At the same time the sewage will be lifted four times the height, thus giving the sewers a fall four times greater, and will be sent a mile further away from the town. In the face of these facts, M. Durand Claye, in his reply, withdrew his aspersions against the Shone system; maintained that the adoption of this or the Waring system must depend on local circumstances; and that, for his part, he was quite content if the Congress agreed with him in the necessity of doing away with cesspools, and of draining directly into the sewer. With concluding remarks to this effect the question was allowed to drop.

On the other hand, in the discussion on cholera and quarantine, an immense number of resolutions were brought forward, some containing very mischievous principles. But they were most ably combated by Professor Max Pettenkofer of Munich, Dr. Mosso of Turin, and Mr. Shirley Murphy of London. The latter gentleman pointed out that all speakers at the Congress had approved the necessity of enforcing sanitary reform in the towns exposed to infection. This was recognised on all sides as the most effective precaution. The only point under debate was whether such measures of medical inspection should be adopted as practically involved the imposition of a quarantine of five days. In England the belief in the utility of such a precaution had long since been abandoned. Its application would lead to the neglect of those sanitary measures so strongly recommended by Dr. Max Pettenkofer. The idea of excluding from Europe ships which, in passing the Suez Canal, were found to have had cholera cases on board was not logical, for the land route would still remain open. The retention of these ships would engender a sense of false security and prevent seaport and other towns adopting those sanitary measures which were really useful.

The manner in which these and similar observations were received showed how greatly public opinion has developed on this question; but the speech of Dr. Mosso, the Italian delegate, was particularly remarkable in this respect. He explained that Italy had gone through both experiences. They had imposed the strictest quarantine, and had imposed it everywhere. But it had proved to be good money thrown away. The same Minister (Signor Crispi) who had imposed quarantines now declared them to be useless. At Turin, thirty trains a day came to the town from an infected district during the recent Exhibition. There were about 100 cases of cholera imported, and no further mischief arose. Quarantine in the Red Sea, while Algeria, Tunis, and Tripoli remained open was a mere vexatious inconsistency. By far the greatest good would be done by telling people that their immunity from cholera depended on their using plenty of pure water and living in clean houses.

By such speeches the worst passages were eradicated from the resolutions; and when these are published they will show that opinion on the Continent on this subject has made considerable progress. The resolution will have issued from the printing offices in the course of a few days, and then, and in another letter, it will be possible to deal more fully with the work of the Congress.

BUDA-PESTH.

(From a Correspondent.)

SIR SPENCER WELLS and Professor HUMPHRY have just been here on their way to the Hygienic Congress at Vienna, which, as will be remembered, Sir Spencer was requested to attend as delegate by the College of Surgeons of England, and Professor Humphry by the University of Cambridge. The members of the medical profession of the place, being forewarned of the visit of Sir Spencer Wells, availed themselves of the opportunity to do him honour and pay him attention. At appointed times they met him at the several hospitals to show him the institutions and consult him respecting the cases. In the evening they gave him a banquet in the Queen of England Hotel, during which an address in English was made to him by the medical

students. In his reply, Sir Spencer encouraged them to diligent work, by which alone they could obtain success, and exhorted them to take advantage of the very great opportunities for clinical instruction which their hospitals afforded. Replying to his health, which was proposed in a complimentary English speech by Dr. Mackiesovszki, he thanked the members present sincerely for the honour they had done him, and expressed his great satisfaction at what he had seen in their hospitals. Professor Humphry, in reply to the toast, which was proposed to him as delegate from Cambridge by Dr. Jauffer, thanked those present on behalf of the medical profession in England for the honour they had done to one of its members who was justly esteemed for the part he had played in bringing about the great triumphs which had been recently achieved in abdominal surgery. The Professor further complimented them on their hospital arrangements, and the refinements in their instrumental methods of diagnosis, which exceeded, he believed, those employed in any hospital in his own country.

The hospitals which were visited certainly corroborate these remarks. Great attention is paid to ventilation and heating, which during the severe cold of winter are effected with much difficulty, to general sanitary arrangements, and to the care and comfort of the patients. The clinique of each professor occupies two or more hours daily. He attends himself to the dressings of the more important cases, and there is much hearty work between him, his assistants, and the students. There is a physical laboratory, with a delicate electrical apparatus for testing the sensitiveness of the general surface and of the ear, the action of muscles, &c., in addition to the ordinary methods for diagnosis and treatment, also a histological and a bacteriological laboratory attached to each hospital. Antiseptics are largely used. In one ward under Dr. Ellescher were five women recovering from laparotomy on account of uterine and ovarian tumours. Several specimens of cancer of the uterus were shown, in which the whole organ had been successfully removed through the vagina by Dr. Jauffer, and this surgeon elicited the high approbation of Sir Spencer Wells for the manner in which he performed a difficult operation of enucleating from the left broad ligament a compound ovarian cyst of considerable size, which, from the position of the uterus and other signs, had been diagnosed by himself and Sir Spencer Wells to occupy that position. The carbolic spray was diffused through the room, not directed upon the patient, and carbolic water was freely used throughout. The bleeding vessels were secured with silk ligatures, and a portion of the broad ligament having been ligatured and cut away, the remainder was stitched to the surface of the uterus, as first done by Sir Spencer Wells.

The Red Cross Hospital, which has been opened about two years, receives private patients, who pay three, two, or one guilden (6s., 4s., or 2s.) a day, for which they receive board, lodging, and medical attendance, an extra fee being paid for operations. The plan and administration of this hospital are admirable. It is supported mainly by private contributions and subscriptions, and subsidised by Government, which pays for all the stores, medical and surgical appliances, ambulances and carriages for the sick and wounded, &c., which are kept here and supplied to the several military stations in time of peace, and to various parts in time of war. One block is reserved for nurses, who, having been trained in the hospital, are available for attending the surrounding district. The lady superintendent, who accompanied the party round, is a highly intelligent person, and deeply interested in the work, priding herself especially upon the excellence and cleanliness of the culinary department, as well as upon the variety of the stores and the manner of their disposition.

A NEW METROPOLITAN HOSPITAL. — The New Metropolitan Hospital buildings in Kingsland-road, which have for some time past been in course of erection, were opened for the reception of patients on the 1st inst. The institution was originally known as the Metropolitan Free Hospital, and has for some time had premises of a temporary character in Bishopsgate-street, but at a recent meeting of the governors it was decided that the word "Free" be omitted, and that in future all patients, except accidents, should contribute a small sum whilst under treatment. The cost of the new building, exclusive of the land, is about £25,000, but the entire cost when the intended south end block is erected is estimated at £40,000.

MANCHESTER.

(From our own Correspondent.)

OWENS COLLEGE.

THE opening of the medical department by an introductory address has within the past few years been more honoured in the breach than in the observance; this year, however, a return to the old custom is made, and Sir James Paget will to-morrow deliver the "introductory," which, from the high position held by Sir James as an orator, is being looked forward to by the profession with considerable interest. In the evening he will be entertained at the annual medical dinner to be held as usual at the Queen's Hotel. The departments of arts, science, and law were opened this morning by an address from Professor Dixon, F.R.S., successor to Sir Henry Roscoe in the chair of Chemistry. The evening classes of the College will be opened on Monday next by an address from Professor Kastner, and the department for women will be inaugurated by an address from the Bishop on the 17th inst.

ROYAL INFIRMARY, ETC.

At the last Board meeting of the infirmary an unusual offer was made to present to the institution a cottage hospital, to be situate in Hulme, fully furnished and equipped. The Board acknowledged the receipt of the handsome proposal, but requested time to consider the matter, as the maintenance of the hospital, some twenty beds in number, would entail an additional annual expenditure of at least £1000, and at the present time the Convalescent Hospital at Cheadle is a large drain upon the funds of the parent institution. At the same meeting Mr. Milner, late resident medical officer at Cheadle, was appointed resident surgical officer at the infirmary, in place of Mr. Collier, who has recently been appointed assistant surgeon to the Children's Hospital, Pendlebury. It is satisfactory to note that the higher resident appointments at the infirmary have of late been conferred upon Manchester students, as at one time it almost appeared that the powers that be had determined not to select students of our own school for the more responsible positions in the various institutions under their control.

HOSPITALS FOR INFECTIOUS DISEASES.

The question of the site for the new fever hospital proposed to be erected by the Salford Corporation is still a *quæstio vexata;* much angry discussion still goes on in relation to it, and much opposition will have to be overcome before the proposed building is an accomplished fact. At the last meeting of the Cheadle Local Board a proposal was brought forward for the provision of a small hospital there for infectious diseases, the cases from that district hitherto having to go to Stockport if they were isolated. At Newton Heath the Local Board still protest vigorously against the extensions of the Monsall Fever Hospital going on there, and consider they are hardly dealt with in having all the infectious disease of the city and suburbs brought into their township. At Gorton the Local Board have signified their willingness to pay 2s. 6d. for each certificate of infectious disease sent in by the medical practitioners of the district, compulsory notification not as yet being in force there.

POISONING AND HOMICIDE.

Two melancholy accidents have occurred within the last month at two of our hospitals. At the infirmary one of the house surgeons, in administering to himself a hypodermic injection of morphia to relieve the pain of neuralgia, took an over-dose, from which he never recovered; and at the asylum at Prestwich an attendant was attacked and killed by a lunatic, who had been an inmate for years and was considered quite harmless.

WATER SUPPLY.

Notwithstanding the late rainfall, we are still on "short time" with our water supply, it being turned off for twelve hours out of the twenty-four. The Water Committee assert that they are within three weeks of the end of their present supply, and that the rain hitherto has scarcely affected the quantity in the reservoirs; but now that the dry ground has become comparatively soaked, it is to be expected that each fall of rain will now find its way in large quantity to the reservoirs.

CHURCH PARADE.

The Manchester Division of the Volunteer Medical Staff Corps attended their first church parade at St. Matthew's Church on the 25th ult., when a special sermon was preached by Canon Kelly, honorary chaplain to the corps. At the review held on Saturday last by the Duke of Cambridge, the same corps marched out in most creditable style under the command of Surgeon Crockwell, and elicited some words of commendation from the Commander-in-Chief.

Oct. 4th.

LIVERPOOL.

(From our own Correspondent.)

SCARLATINA AT THE SCHOOL FOR THE DEAF AND DUMB.

IN consequence of a serious outbreak of scarlatina, the School for the Deaf and Dumb has been temporarily closed. Four cases were at once sent to the fever hospital of the workhouse, and subsequently six more. When Mr. Charles G. Lee, the surgeon to the institution, was first appointed some years ago, he found the sanitary arrangements most defective. At his suggestion most of these have been remedied, and little remains to be done to make the building as perfect in a sanitary sense as possible. This institution, which, though not a medical one, is of great interest to the profession, is under excellent management, and every opportunity is afforded to its afflicted inmates to receive a good education, and to be eventually enabled to earn their livelihood.

THE RECENT CASES OF HYDROPHOBIA.

As might have been expected, such an unusual occurrence as three fatal cases of hydrophobia occurring within so comparatively short a time, has produced a scare here. The order requiring all dogs in the street to be under control has been extended to all the neighbouring townships, and also to Bootle. No other cases have been reported.

THE MEDICAL FACULTY OF THE LIVERPOOL UNIVERSITY COLLEGE.

Dr. Campbell Brown, the Professor of Chemistry, having been for some time located in the new laboratories, those formerly occupied by him have been added to the physiological laboratories, where, under the able superintendence of Dr. Larkin, physiology is now learned by the students in a most thorough and practical manner. Many improvements have also been made in the dissecting and anatomical rooms, where students can learn anatomy with every comfort and convenience. The rooms will be reopened to-morrow, between fifty and sixty students have entered their names, and an ample supply of subjects has been secured.

THE ROYAL INFIRMARY.

The buildings are being rapidly taken down, and it is expected that the foundation stone of the new buildings will be laid on or about the 29th inst.

Liverpool, Oct. 4th.

BIRMINGHAM.

(From our own Correspondent.)

HOSPITAL SUNDAY.

A VIGOROUS appeal, signed by the Mayor and the secretaries of the Periodical Collections Committee, has just been issued. The proceeds this year fall by rotation to the Queen's Hospital, and the appeal sets forth in earnest terms the necessities of this deserving charity. When it is stated that the increase in the numbers over the last triennial period is over 28,000, and we learn that the estimated deficiency is £2500, it will be seen that there is a good case for urging the wants of the institution among the various places of worship in the town and district.

MUSHROOM POISONING.

A man, aged thirty-five, in apparently good health, partook of a hearty supper with a quantity of mushrooms. A few hours later he woke up complaining of abdominal pain, vomited, and became insensible, dying at 4 o'clock in the morning. The doctor who was called in attributed the death to blood-poisoning caused by the mushrooms, which were probably decomposed. He stated that he had lately seen a case where similar symptoms were produced by eating mushrooms, adding that some people were particularly liable to ill effects from eating them. It is of importance that to be wholesome they should be fresh, and free from any mixture with fungi of similar appearance but of poisonous properties. It is highly probable that Saturday night suppers are often eaten hastily and accompanied by much drinking; for example, at the same time, an inquest was held upon the body of a man who had died from choking, a piece of raw meat an ounce and a quarter in weight being extracted from his throat after death.

QUEEN'S COLLEGE.

The annual conversazione and distribution of prizes was held on the 3rd inst., and was largely attended. After the reception and address by the vice-president, Dr. Wade delivered an address, which was well received. The report stated that the number of entries at the commencement of last winter was 46, the number of students on the books of the College being 178; 36 passes had been obtained at the examination, 6 being at universities; at other examinations 98; making a total of 134. Since midsummer the intermediate examinations in medicine at the London University had been very successful with regard to this College, for of 7 who went up 5 passed in all the subjects. The year was also marked by the opening of the Eye Hospital and the Orthopædic Hospital to students for practice, which now took their place with the other hospitals and the Borough Lunatic Asylum for teaching purposes. The requirements of professional knowledge are thus amply rendered accessible to all who desire them.

CHURCH CONGRESS.

At the neighbouring town of Wolverhampton the assembly of the Church Congress excites a large and widespread interest. From a medical point of view the profession may be congratulated on the fact of the Mayor of Wolverhampton belonging to their ranks. The dignity of his office has been well represented in the reception given to the members of the Congress, and by the appropriate manner in which he has shown that the position of the two callings are united in the pursuit of the highest and best works.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NO AMBULANCE.

AN inquest has been held on the body of a miner who died in a few hours after admission to the Durham County Hospital, having been severely crushed by a fall of stone during his work; he sustained a fracture of the thigh and compound fracture of the left leg, and also fracture of the left arm. When admitted, the house surgeon, Dr. Collinson, found him in a state of collapse. It appeared that at the mine, there being no ambulance carriage at hand, he was placed on a stretcher in a coal cart, a mode of transit rather slow and rough for such injuries, the coal mine being several miles from the hospital. The coroner and the jury, however, seemed to think it a light matter, and that the unfortunate man had suffered no injury from the journey.

POPULAR LECTURES.

The season of popular lectures has set in here, and our professional brethren are well to the front in this matter, as they generally take up subjects which they well understand. Dr. Robertson of Newcastle gave an interesting and most instructive lecture last week on "Life in South Africa." Dr. Robertson was well qualified for the task; he possesses a full knowledge of the country from prolonged residence there, and it is no wonder that he was frequently applauded by a critical audience, who fully appreciated the abilities of the lecturer.

Newcastle-on-Tyne, Oct. 4th.

A YOUNG man has died at Hamilton from injuries received about a week previously while playing in a football match.

EDINBURGH.

(From our own Correspondent.)

THE SALUBRITY OF EDINBURGH.

THE water of Leith, a small tributary falling into the Firth of Forth, and traversing in its course some of the western districts of the city, has been for some years a source of annoyance and discomfort to the inhabitants of the localities through which it flows on account of its greatly polluted nature. This pollution has been shown by Professor Crum Brown and Mr. Reid to be in some part due to sewage contamination, but to a far greater degree traceable to waste products of manufactures finding their way into the river. It is alleged that this is especially true of the refuse material from paper works, where vegetable matter is allowed to ferment in water tanks to separate the fibrous constituents, just as is done in the preparation of flax. The water from these tanks, loaded with organic matter, and still in a putrescent condition, is allowed to enter the river in its higher reaches, and is by no means rendered pure and odourless before its flow through the city. Along its course the river deposits banks of mud, consisting chiefly of this organic matter originally in suspension in the water, and these mud banks left exposed in summer drought are a source of great annoyance. The Corporations of Edinburgh and Leith have at length, after repeated warnings, decided on taking legal measures conjointly for the abatement of the nuisance; and although this decision on their part has been met on that of the manufacturers by a strong protest in the form of a circular setting forth the "harassed and handicapped" condition of the British paper trade, it seems now certain that the matter will be pressed forward, and the nuisance, which has for long been a clamant evil, finally and completely removed.

THE WINTER SESSION.

The winter session will open two weeks hence, when a further advance in the number attending the University is expected. The preliminary examinations in general education now in progress are taken part in by nearly 400 candidates, an increase on the usual numbers at the autumn preliminary examination.

THE TEACHING OF AGRICULTURE.

Professor Wallace, of the Chair of Agriculture, is on his return voyage from India, whither he proceeded some months ago with the intention of becoming acquainted with the agricultural condition of that country. Every facility has been afforded him in his researches, and it is understood that his object has been fully realised. The materials now at his command will doubtless prove of much value in increasing the scope of his course of instruction, and enabling him to prepare students for a much wider area of usefulness than has previously been the case.

Edinburgh, Oct. 4th.

ABERDEEN.

(From our own Correspondent.)

ABERDEEN UNIVERSITY.

THE winter session commences on the 19th inst., and the preliminary examinations will be held on Monday, the 17th, and Tuesday, the 18th of October, commencing at 10 A.M. each day. A meeting of the General Council will be held in Marischal College on Wednesday, the 12th inst., and one of the items of business is a motion by Professor Struthers "that the Committee to watch over legislation affecting the University be reappointed." The office of Lord Rector of the University becomes vacant this year, and the Senatus have resolved to recommend to the University Court that Saturday, November 12th, be fixed as the most suitable day for the election of Lord Rector.

AMBULANCE LECTURES.

Mr. W. Leslie Mackenzie, M.A., lately delivered five lectures on Ambulance Work to railway servants. The lectures were illustrated by diagrams, apparatus, and specimens from the Surgical Museum, all placed at the disposal of the lecturer by Professor Ogston. The instruction was made as practical as possible. The attendance was very large, but divided into small classes. Each man had practical instruction in bandaging, the application of splints, &c. Mr. Dingwall, A.M., another medical student, delivered a similar course of lectures to the men engaged in one of our large quarries. Here also the instruction was as practical as possible, and the men entered into the work most enthusiastically. This work of ambulance instruction is carried on under the auspices of the Aberdeen Ambulance Association, and it is intended to hold classes during the winter in most of the large manufactories and works in the city.

Aberdeen, Oct. 4th.

DUBLIN.

(From our own Correspondent.)

KILKENNY.

SOME time since the services of Sir Charles Cameron as analyst for Kilkenny were discontinued, although his salary only amounted to £5 a year. At present there is a good deal of sickness in certain parts of the town, principally diarrhœa, which has been attributed to the water obtained from the pumps being contaminated with sewage. The Corporation are thinking of having the water analysed, and will have to pay a fee of two guineas for the same; while for the salary of £5 Sir Charles Cameron was bound to perform any number of analyses that might be required. Besides, it is not every medical practitioner who is sufficiently skilled in this particular branch to be able to analyse a sample of water, and it must not be forgotten that the cost of procuring the necessary instruments would amount to a very considerable sum. It follows from this, that should the Corporation require an analysis of the suspected water to be made, they may be obliged to obtain the services of Sir C. Cameron, the eminent analyst for Dublin.

THE DUBLIN DEATH-RATE.

The Public Health Committee of the Corporation of Dublin have had under consideration the excessive mortality in certain districts of the city, and have adopted the following resolution on the subject:—"That the attention of the dispensary doctors of Nos. 1, 2, and 3 North City, and Nos. 1, 2, and 3 South City, be directed to the very excessive death-rate in their districts, especially in No. 1 South City, where it reached 41·8, and in No. 2 South City, 52·24; and to request them to report if they can point out any cause for this excessive mortality, and whether it occurs in the infant or adult classes." The epidemic of measles, which has existed for months, during the last few weeks has shown a marked diminution in the mortality from this disorder.

The death is recorded of Dr. William Daxon, F.R.C.S., late resident medical superintendent of Ennis district lunatic asylum.

PARIS.

(From our Paris Correspondent.)

DR. BROUARDEL ON TYPHOID FEVER.

DR. BROUARDEL, who represented the French Faculty at the International Hygienic Congress recently held at Vienna, delivered a very interesting address on Enteric Fever. In referring to the etiology of the disease, he stated that whatever be the primary origin or nature of this affection, it is now certain that it may be propagated through the following principal agents: drinking water, the air which we breathe, the soiled linen of typhoid patients, and through the hands of the nurses attending them. These means of propagation, he added, have long been recognised, but they were hypothetical, whereas now it is possible to assign to each of these agents its proper position in the genesis of the disease, drinking water being the principal vehicle of the germs of typhoid fever, for in ninety-nine cases out of a hundred the cause has been clearly traced to it. Thus it may be seen that, whether the disease owes its origin to the decomposition of organic matter or to a specific virus, it will be easy, by

appropriate means, to render epidemics of enteric fever, if not impossible, at least extremely rare.

In connexion with this subject, I may mention that during the epidemic of typhoid fever which recently prevailed at Belvès, four bottles filled with water drawn from fountains of the town were forwarded to the Academy of Medicine. This water was subjected to chemical analysis by two eminent chemists attached to the Academy, who found an exaggerated proportion of the chlorides and of organic matter. Dr. Chantemesse made a bacteriological examination, and found the bacillus of typhoid fever in the water of one of the fountains.

FURFUROL IN ALCOHOL.

At the meeting of the Academy of Medicine of last week M. Bacchi read a note on the importance of the purification of alcohol for drinking purposes. According to the author, all alcohols employed for the manufacture of spirituous liquors contain furfurol in variable quantities, and consequently are more or less injurious. To remove this furfurol it is necessary to distil the alcohols according to Bang's procedure, which he considers the only effectual one, in which case the alcohol only produces the phenomena of ebriety without any convulsifying symptoms. M. Bacchi, however, omitted to inform the Academy as to the nature of Bang's method. A description of furfurol was then given. It is met with particularly in the alcohols of grain, such as oats, rye, and barley. It is obtained by the action of sulphuric acid on oatmeal or on bran, or, better still, by the action of sulphuric acid on a mixture of sugar and starch, with binoxide of manganese. It is a colourless liquid, becoming rapidly brown under the influence of the air, and it possesses an odour recalling at the same time that of the oil of cinnamon and that of bitter almonds. When it is administered to animals in a dose of a few cubic centimetres, its toxicity immediately becomes evident; one observes almost instantaneously tetanic symptoms and genuine attacks of epilepsy, whilst the respiratory movements become slackened and are soon completely arrested. These experiments throw a great light on the pathogeny of alcoholism, and furnish the explanation of certain contradictory facts tending to admit a semeiology differing according to the country in which alcoholism is observed. In Ireland and in Scotland, for example, one frequently observes in acute alcoholism attacks of epilepsy; whereas in France these accidents are noticed only in drinkers of "absinthe," "bitters" (a liqueur), and "vermouth." This is owing to the fact that in these countries the workpeople and peasants drink not only alcohols of grain, but also the residue left by these alcohols after distillation. What is now known of alcohols of industry explains the toxic action of the greater part of brandies and of rum delivered for the consumption of the public. All these spirituous liquors are alcohols by a sort of irony termed *supérieurs*, more or less adroitly aromatised. Drs. Laborde and Magnan have made combined researches on the toxicity of alcohols termed *supérieurs* and of *bouquets artificiels*, the results of which have been recently communicated to the Society of Public Medicine and Hygiene, and may be summarised as follows: In 1869 the proportion of alcoholic patients admitted into the asylums of the Department of the Seine attained, of the total of all admissions, including children and epileptics, the proportion, already very high, of 26 per 100 for men and 5 per 100 for women. At the end of the siege of Paris and of the Commune the admissions into the Sainte-Anne Asylum rose to 48 per 100 of alcoholics; then there was a fall from 1872 to 1875; the annual average oscillated between 17 and 19 per 100, to rise again at the end of the latter year. In 1886 the average rose to 25 per 100, and the first half of the year 1887 gave an equally large proportion. With reference to liqueurs and bouquets, these investigators remark that liqueurs were formerly the product of the distillation of the alcohols of wine, holding in dissolution aromatic substances, whereas now manufacturers simply add essences and sugar to alcohol, more or less rectified. The liqueur termed "absinthe," which frequently contains salicylate of methyl, produces, besides ebriety, with loss of sensation and of motion, veritable attacks of epilepsy. I cannot here give an account of all the liqueurs referred to in the communication of Drs. Laborde and Magnan, but will conclude with their just remark, that the falsificators are largely responsible for the physical, intellectual, and moral degeneration of the populations resulting from the products employed by them.

Paris, Oct. 4th.

THE SERVICES.

Deputy Surgeon-General Bradshaw, at present in medical charge of the Northern District at York embarked in the *Euphrates* troopship on Wednesday last for service in India.

Deputy Inspector-General John Caldwell, R.N., died on the 29th ult., at Hartfield-road, Wimbledon, in the fifty-ninth year of his age.

WAR OFFICE.—Army Medical Staff: The surname of the Surgeon-Major whose promotion to the rank of Brigade Surgeon was notified in our issue of the 24th ult., is MacAdam, and not as therein stated.

INDIA OFFICE.—The Queen has approved of the retirement from the Service of the undermentioned officers of the Indian Military Forces:—Brigade Surgeon David William Trimnell, Madras Medical Establishment (dated Aug. 1st, 1887); Surgeon-Major William Nolan, M.D., Bombay Medical Establishment (dated Sept. 24th, 1887); Surgeon-Major Francis Jones, Bombay Medical Establishment (dated Sept. 1st, 1887). The undermentioned officers have been granted a step of honorary rank on retirement:—Brigade Surgeon James Champion Penny, M.D., Bengal Medical Establishment (dated June 3rd, 1887), and Brigade Surgeon David William Trimnell, Madras Medical Establishment (dated Aug. 1st, 1887), to be Deputy Surgeons-General.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon Charles Morton has been placed on the Retired List, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets (dated September 27th, 1887). Fleet Surgeon James Nicholas Joseph O'Malley has this day been placed on the retired list, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets. The following surgeons have been promoted to the rank of Staff Surgeon in Her Majesty's Fleet:—Charles Albert Macaulay, M.D., and Christopher Pearson, M.A., M.D. (dated September 30th, 1887).

The following appointments have been made:—Staff-Surgeon C. A. Macaulay to the *Constance*, and Staff-Surgeon Christopher Pearson to the *Gannet*, reappointed on promotion (dated Sept. 30th).

RIFLE VOLUNTEERS.—1st Volunteer Battalion, the Northumberland Fusiliers: Surgeon T. Stainthorpe resigns his commission; also is granted the honorary rank of Surgeon-Major, and is permitted to continue to wear the uniform of the battalion on his retirement (dated Oct. 5th, 1887).

Obituary.

FRANCIS OGSTON, M.D.

BY the death of Dr. Francis Ogston, at the advanced age of eighty-four, which occurred at his residence at Aberdeen on the 25th ult., one of the few remaining links that bind the present with the early part of the century is removed, and the connexion with the foundation of the Medical School at Aberdeen, so far as living representatives is concerned, is entirely snapped. Born in Aberdeen, Dr. Ogston received his early education in that city, and subsequently studied medicine at Edinburgh, where, in 1824, he took the degree of M.D., and became a Licentiate of the Royal College of Surgeons. In 1832 he was appointed Lecturer on Medical Jurisprudence in Marischal College and University, Aberdeen, and in 1857, when that lectureship was converted by the Crown into a professorship of Medical Logic and Medical Jurisprudence, he was elected to the post. On the union of King's and Marischal Colleges in 1860 he was transferred to the same chair in the University of Aberdeen, the duties of which he continued to discharge down to the time of his retirement in 1883. He was therefore a teacher in the University for half a century, and was for a quarter of a century professor both of Medical Logic and Medical Jurisprudence. Dr. Ogston acted for a long period as police surgeon; for several years he held the office of Dean of Faculty; and for two separate terms he represented the Senatus in the University Court. Subsequently to his retirement, the University to which he had been so deeply attached, and which he had served so well, conferred upon

him (in 1885) the honorary degree of LL.D. Dr. Ogston contributed several papers on medico-legal and pathological subjects to various British and foreign journals.

DR. JOSEPH MEYER.

ON the 25th ult., at Berlin, the Geheim-Medicinal-Rath, Professor Joseph Meyer, died at the age of sixty-six. He died, indeed, at his post as director of the Royal University Polyclinic. No Berlin physician enjoyed a higher reputation than he among his professional brethren and the general public. He first became favourably known as assistant physician to the late Professor Schönlein, at whose death he was called to fill the onerous position of directing physician of the Charité-Krankenhaus. On the death of Professor Romberg he succeeded that able pathologist in the superintendence of the University Polyclinic, and discharged its duties with exemplary skill and success till his decease. Some years before he had been nominated Professor Extraordinary in the University, and in the course of last session he was promoted as Geheim-Medicinal-Rath, a high professional honour. The lay journals of Berlin associate themselves with the medical in deploring the loss of an eminent citizen as well as of a valuable professional adviser.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received certificates to practise as Licentiates of the Society on Sept. 19th:—

Yunge-Bateman, Marcus George, Folkestone.
Beaumont, William Henry, Whaddon, Royston.
Buist, James Joseph, Pembroke-terrace, Cardiff.
Clarke, Edward Albert, Manchester-road, Denton.
Hemming, John Joseph, Fitzroy-road.
Ledward, Milton Prentice, York-street, Cheetham, Manchester.
Millington, John Perrett, High-street, Wolverhampton.
Spreat, Frank Arthur, Weymouth-street.
Stevens, William Henry Arthur, Droitwich.

The following gentlemen passed the examinations in Surgery held on Sept. 14th, 15th, 28th, and 29th:—

Bell, Walter Whilmarsh, Westminster Hospital.
Blacklock, John, Owens College, Manchester.
Dickson, Herbert Edward Balmain, Edinburgh.
Marsh, Alfred Herbert, Owens College, Manchester.
Mc Oscar, John, Middlesex Hospital.

THE Aberdeen Infirmary Jubilee Extension Fund amounts now to £25,140.

PRECAUTIONS AGAINST TRICHINOSIS.—Small quantities of pigs' meat coming from Poland into Silesia are now examined at any of the toll stations at a fee of 6*d*.

THE measles epidemic in the Hebrides is still spreading, and during the past few days has assumed rather serious dimensions.

IT is reported that in the course of the interesting excavations at Pompeii, a wooden case has been dug up containing a complete set of surgical instruments, many of which are similar to those used in the present day.

THE FELDSHER SCHOOL AT KAZAN.—The school for feldshers (a lower grade of practitioners) in Kazan is about to undergo some modifications, a department for training female feldshers being added.

GUY'S HOSPITAL MEDICAL SCHOOL.—The entrance scholarship in Arts, of 125 guineas, has been awarded to Mr. Richard L. Wason; and the entrance scholarship in Science, of 125 guineas, to Mr. Alfred Theodore Rake.

AT a meeting of the Sanitary Committee of the Newcastle Corporation on the 28th ult., it was decided to adhere to the arrangement which had been made not to admit patients suffering from small-pox into the new Fever Hospital.

AN outbreak of scarlet fever at the Liverpool School for Deaf and Dumb has necessitated its being closed, the inmates who have not been attacked being sent to their homes. The children affected have gone to the Liverpool Workhouse Hospital.

VOLUNTEER MEDICAL ASSOCIATION.—At a meeting held on Friday, Sept. 30th, the following gentlemen were appointed Surgeon Instructors to the Ambulance Department:—Surgeon J. Edward Squire, M.D., Volunteer Medical Staff Corps; Acting Surgeon W. Pearce, M.D., 20th Middlesex (Artists), R.V.

THE GREAT NORTHERN CENTRAL HOSPITAL.—It is reported that the committee of the Islington Jubilee Fund have paid over to this institution a first instalment of £2000 to enable the Building Committee of the hospital to meet liabilities now falling due without borrowing.

THE NEW HOSPITAL AT HASTINGS.—It is proposed, we understand, to formally open the new buildings on the 13th instant. This hospital is, we believe, the largest hitherto built in England with circular wards, and the opening ceremony will therefore be attended with special interest.

A PROSPECTUS of the various classes to be held during the ensuing six months in connexion with the Young Men's Christian Association at Exeter Hall has been issued. The subjects treated are numerous, and the advantages offered by the Association to young men who possess no friends in the metropolis are beyond doubt most valuable.

MEDICAL ADMINISTRATION IN TONQUIN.—*La Semaine Médicale* has received information that the medical service in Tonquin is wofully defective. In some of the provinces there are no doctors, and combatant officers and even sergeants have to act as surgeons. Again, it is stated that at certain of the stations some important drugs—as opium, quinine, and bismuth—are entirely wanting.

A GENEROUS OFFER.—An offer has been made to the Board of the Manchester Royal Infirmary of a cottage hospital for twenty beds in Hulme. The building will be erected and conveyed to the Board free from all debt, and suitably and completely furnished, provided that body wil undertake the management and the cost of maintenance of the patients when it is completely finished. The matter has been referred to the Infirmary Committee.

UTILISATION OF MILITARY HOSPITALS FOR CLINICAL INSTRUCTION.—Most of the Russian universities suffer from an insufficiency of clinical material in the hospitals connected with their medical faculties. An arrangement has now been made to admit students to the practice of certain military hospitals, the military medical authorities and the university faculties appointing assistants and lecturers in concert with one another.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—The annual distribution of prizes to the students attending the school of this Society last session took place on the 5th inst., the ceremony of distribution being performed by the President, Mr. Michael Carteighe. The inaugural address was delivered by Sir Dyce Duckworth, and the Hanbury Gold Medal for Original Research in Natural History and the Chemistry of Drugs was gained by Brigade Surgeon W. Dymock of Bombay.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—The annual meeting of this Society (the first meeting after the amalgamation) will be held at the Holborn Restaurant on the 21st inst., at 4 P.M. Amongst the business to be brought forward will be the presentation of the reports of two committees, that, namely, appointed to consider the amalgamation of the several Societies of Medical Officers of Health, and that deputed with the task of considering the proposal to establish a laboratory for the study of bacteriology, and other experimental methods of research. At the conclusion of the annual meeting the sessional meeting will be held, at which the president-elect will deliver an address.

THE HOSPITALS ASSOCIATION.—The first meeting of the fifth session of this Association will be held at the Library of the Society of Arts, John-street, Adelphi, on the 12th inst., at 8 P.M., under the presidency of Sir Andrew Clark (president), when a paper will be read by Mr. Henry C. Burdett explanatory of the scheme for the formation of a "National Pension Fund for Hospital Officials and Trained Nurses." Invitation cards may be obtained of Mr. Howard J. Collins, Secretary, Norfolk House, Norfolk-street.

THE FRENCH VETERINARY ASSOCIATION.—The Association of French Veterinary Surgeons, which has just met at Bordeaux, expressed an opinion that the inspection of meat ought to be very much more real than it has been. A vote was also unanimously passed expressing the view of the Association that veterinarians ought to be admitted as members of the National and Departmental Sanitary Councils. A vote passed last year at the meeting held at Lille, to the effect that one of the diplomas of Bachelor of Letters or Bachelor of Sciences ought to be compulsory for veterinary students, was confirmed.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADIE, ALFRED A., L.R.C.S., L.R.C.P Ed., has been appointed House-Physician to the Royal Infirmary, Glasgow.

ATKIN, CHAS., F.R.C.S., L.R.C.P.Lond., has been appointed Honorary Assistant Surgeon to the Sheffield General Infirmary.

BROGDEN, RICHARD W., M.B., B S. Lond., has been appointed Physician to the East Suffolk and Ipswich Hospital.

BULLMORE, W. KING, M.D.St.And., M.R.C.S., has been reappointed Medical Officer to the Falmouth Dispensary.

COCKING, W. TUSTING, M.B.Lond., M.R.C.S., has been appointed Honorary Assistant Physician to the Sheffield General Infirmary.

DUNCAN, ALEX., M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

EDGAR, JOHN, B.Sc., M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

GRAHME, WILLIAM D., M.B., C.M., has been appointed House-Physician to the Royal Infirmary, Glasgow.

GRANT, DAVID, M.A., M.D. Edin., Lecturer on Materia Medica at the University of Melbourne, has been appointed Physician to Out-Patients at the Melbourne Hospital; and Examiner in Therapeutics, Dietetics, and Hygiene at the University of Melbourne.

HALLAM, ARTHUR, M.R.C.S., L.S.A., has been appointed Honorary Assistant Surgeon to the Sheffield General Infirmary.

HILL, C. M., M.R.C.S., L.R.C.P.Lond., has been appointed Assistant House-Surgeon to the Halifax Infirmary and Dispensary, vice H. Fitton, resigned.

JAMES, ALFRED, M.R.C.S., L.S.A., has been appointed Medical Officer for the Workhouse of the Biggleswade Union.

MCEWEN, HENRY C., B.Sc., M.B., C.M., has been reappointed House-Physician to the Royal Infirmary, Glasgow.

MCLENN, ALEX. D., L.R.C.S., L.R.C.P.Ed., has been appointed House-Physician to the Royal Infirmary, Glasgow.

MILNER, E. TAYLOR, M.A., M.B.Oxon., M.R.C.S., has been appointed Resident Surgical Officer to the Convalescent Hospital at Cheadle in connexion with the Manchester Royal Infirmary.

ORD, FRED. W., L.K.Q.C.P.I., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

PLEWS, PAUL RHODES, L.R.C.P.Ed., L.F.P.S.Glas., has been appointed Medical Officer for the Fourth District of the Bethnal-green Union, vice Defriez, deceased.

PORTER, W. SMITH, M.D.Dur., M.R.C.S., has been appointed Honorary Assistant Physician to the Sheffield General Infirmary.

ROBINSON, HARRY W., M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

SHIPLEY, A. E., B.A., has been appointed Demonstrator of Comparative Anatomy in the University of Cambridge.

THOMSON, GEORGE, M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

THORBURN, WILLIAM, M.D., B.S., B.Sc.Lond., F.R.C.S., has been reappointed Surgical Registrar to the Manchester Royal Infirmary.

WATKINS, HAROLD F., M.B., C.M.Ed., has been appointed Medical Officer for the Fifth District of the Mansfield Union.

WETWAN, WILLIAM A., M.R.C.S., L.S.A., has been reappointed Medical Officer of Health for the Bridlington Urban Sanitary District.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM BOROUGH ASYLUM.—Clinical Assistant. Board and residence, but no salary.

CUMBERLAND INFIRMARY, Carlisle.—Assistant House-Surgeon. Salary £40 per annum, with board and lodging.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—Registrar and Chloroformist. Salary £30 per annum, with an additional £20 if the post is held for twelve months.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, W.C.—Junior Resident Medical Officer. Salary £50 per annum, with board and residence in the hospital.

INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY.—Senior House-Surgeon. Salary £60, rising to £70, with board and residence.—Also Junior House-Surgeon. Salary £50, rising to £60.

NATIONAL SANATORIUM FOR CONSUMPTION AND DISEASES OF THE CHEST, Bournemouth.—Resident Medical Officer and Local Secretary. Salary £150 per annum, with board and lodging.

NORTH-WEST LONDON HOSPITAL, Kentish-town-road.—Assistant Resident Medical Officer. Board and residence in the hospital.

NOTTINGHAM GENERAL HOSPITAL.—Resident Medical Assistant. Board, lodging, and washing, but no salary.

ROYAL BERKS HOSPITAL, Reading.—Physician.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Pathological Curator.

ROTHERHAM HOSPITAL.—Assistant to the House-Surgeon. Rooms, commons, and washing, in lieu of salary.

ROYAL LONDON OPHTHALMIC HOSPITAL, Blomfield-street, Moorfields, E.C.—Junior House-Surgeon. Salary £50 per annum, with board and residence.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Physician.

TAUNTON AND SOMERSET HOSPITAL.—Honorary Surgeon.

Births, Marriages, and Deaths.

BIRTHS.

COX.—On the 3rd ult., at Cape Town, South Africa, the wife of J. Herbert Cox, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

MURRAY.—On the 1st inst., at The Parks, Tenbury, Worcestershire, the wife of W. Berkeley Murray, M.D., of a son.

ROSSITER.—On the 3rd inst., at Cairo Lodge, Weston-super-Mare, the wife of George Frederick Rossiter, M.B.Lond, of a son.

WYATT.—On the 30th ult., at Stamford-hill, the wife of W. T. Wyatt, M.A., M.D., of a son.

YOUNG.—On the 28th ult., at Rose Bank, Merton-road, Bootle, near Liverpool, the wife of T. Frederic Young, M.K.Q.C.P., M.R.C.S., of a son.

MARRIAGES.

CARTER—GRANT.—On the 28th ult., at Christ Church, Bootle, Liverpool, by the Rev. A. T. Scott, M.A., Vicar of Tunbridge Wells, assisted by the Rev. F. C. Master, Vicar of the Parish, Godfrey Carter, L.R.C.P., M.R.C.S., youngest son of J. H. Carter, formerly of Leeds, and grandson of the late J. Carter, Banker, of Barnsley, to Harriette Louise, eldest daughter of Duncan E. K. Grant, retired Commander, Royal Navy. (No cards.)

LOWNDS—REED.—On the 5th inst., at Christ Church, Sunderland, by the Rev. C. Wadsworth, M.A., James Richard Lownds, Camb., L.R.C.P., L.R.C.S.Ed., eldest son of James R. Lownds, M.R.C.S., L.S.A., of Newcastle-on-Tyne, to Patty, only daughter of Chas. H. Reed, J.P., Sunderland.

STACEY—HOWARD.—On the 5th inst., at St. Anne's Church, Stamford-hill, by the Rev. J. D. Letts, Vicar, assisted by the Rev. R. L. Allwork, Henry George Stacey, F.L.S., &c., eldest son of Samuel Lloyd Stacey, Esq., of 300, High Holborn, to Mary Josephine Howard, eldest daughter of Joseph Howard, Esq., M.P., of Tottenham, and granddaughter of the late John Eliot Howard, Esq., F.R.S.

WEBB—HAMMOND.—On the 1st inst., at Rotherham Parish Church, William Edward Webb, Surgeon-Major, Army Medical Staff, to Ellen Louisa, eldest daughter of Major Lawrence Hammond, late 90th Light Infantry.

DEATHS.

BUCK.—On the 4th inst., William Elgar Buck, M.A., M.D.Cantab., formerly Honorary Physician to the Leicester Infirmary, aged 39.

CALDWELL.—On the 29th ult., at Hartfield-road, Wimbledon, John Caldwell, Deputy Inspector-General, R.N., in his 59th year.

CHETTI.—On August 31st, at Madras, India (of heart disease), P. Parthasarathi Chetti, M.B., C.M., B.Sc.Edin., aged 27.

MOORE.—On the 23rd ult., at Liverpool, John Percy Moore, M.R.C.S., aged 76.

SIM.—On the 29th ult., at Aberdeen, John Sim, M.R.C.S., aged 84.

WALFORD.—On the 2nd inst., at Argyll-street, W., Robt. Walford, M.B., aged 36.

WHEELER.—On the 2nd inst., at Belgate, Wm. Hy. Wheeler, M.R.C.S., L.R.C.P., aged 34.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 6th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Sep. 30	29·75	N.E.	46	44	89	57	43	·02	Overcast
Oct. 1	30·03	N.	49	47	70	60	46	·15	Cloudy
,, 2	30·30	N.	54	50	87	57	47	...	Overcast
,, 3	30·36	N.	53	50	79	58	51	...	Overcast
,, 4	30·38	N.E.	54	50	69	59	49	...	Overcast
,, 5	30·34	N.E.	54	52	64	56	50	...	Overcast
,, 6	30·19	N.E.	52	50	...	55	49	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

AT LAST!

IT is gratifying to learn that humanity, to say nothing of good taste, has asserted itself at last among a section at least of the fairer portion of the fashionable world. At a conference of ladies held in Bond-street on the subject of dress, it was decided a few days ago that the plumage of small birds should no longer be considered as fashionable trimming for robes or bonnets. Let this decision become accepted by the community in general, and a foul blot on our civilisation will have been removed.

A Medical Muser.—Professor Gamgee, in his work on Yellow Fever (1879), quotes the late Mr. R. Clarke, surgeon to the natives on the West Coast of Africa, who, in a valuable paper in the 1863 volume of the Transactions of the Epidemiological Society, wrote to the effect that yellow fever "is wholly unknown" on that coast. Its prevalence in Africa seems never to have been brought about except by importation through infected shipping. The paludal fever of the West Coast of Africa is different from yellow fever. Yellow fever remains the only disease which in England admits of quarantine, and it is so dealt with purely for commercial purposes. The action taken at the Motherbank station would depend on the statement of the cause of death; and we doubt whether, if yellow fever were recorded as such cause, the authorities would have power to act otherwise than by detaining the vessel.

Mr. Fitzpatrick (Moville).—No, the only methods in use are the removal of the fluid by means of the aspirator or trocar and cannula, and possibly, for purposes of diagnosis, the hypodermic syringe.

J. N. (Cape Town).—The gentleman named has retired from the service.

THE DIETARY OF THE POOR.

To the Editors of THE LANCET.

SIRS,—At the recent meeting of the British Medical Association in Dublin Dr. Lindsay of Belfast read a paper on the dietary of the poor. This subject is a truly vital one, and has had too little attention paid to it—the nation being what its food makes it. Medical men individually can do but little, as advice on the subject is scarcely ever acted upon continuously and systematically. Dr. Lindsay says that the diet of the poor is meagre and insufficient. But this is by reason of its lacking in quality rather than quantity; and to remedy this evil effectually, I can see no way except to make the relative value of our various articles of diet a compulsory subject in all schools, and the elements of physiology also, if not already taught. It is only by beginning at the beginning that we can hope eventually to effect a change for the better in the stamina of our nation.—I am, Sirs, yours faithfully,

Aghot, Sept. 27th, 1887. J. WINTHROP WOODRUFF.

MEDICAL EDUCATION IN NEW ZEALAND.

MR. FRANCIS B. HUTCHINSON, M.R.C.S., &c., in a presidential address delivered recently to the members of the Wellington Philosophical Society, speaking of the present condition of medical education and practice in the colony of New Zealand, remarked as follows:—"It is not possible, with the available anatomical, pathological, and clinical material, that an efficient practical training can be given. Here 'cram' must reign. Hence I believe that the rule lately passed by the Senate, allowing men to graduate in medicine who have had no other opportunities of study than those afforded within the colony, is a mischievous one. The probable result, if carried to any extent into effect, will be that our University will take rank, as regards medicine, with those of the Western States of the Union, known as 'one-horse.' I trust the obnoxious rule will be rescinded, and in this case I speak with the more confidence as I do not express only my own opinion, but that of the members of the Medical Congress lately held in this city."

Ashton Street.—Under the fifth section of the 6 & 7 William IV., c. 89 a coroner is not only enabled, but required, to refuse fees for medical evidence given at his court in the matter of "persons dying in any public hospital or infirmary, or in any building or place belonging thereto or used for the reception of the patients thereof, or dying in any county or lunatic asylum, or in any public infirmary or other public institution, whether supported by endowments or by public subscription"—that is to say, that in such cases the medical officer whose duty it may have been to attend the deceased person as a medical officer of such an institution shall not be entitled to fees or remuneration. The late Bill is merely a consolidating one; it was passed with a view to further enactment of alteration and reform in a subsequent session. It leaves untouched the question referred to in the letter of our correspondent.

SEA-SICKNESS.

To the Editors of THE LANCET.

SIRS,—With reference to Mr. Donnellan's explanation as to the primary cause of sea-sickness, might I ask why the "contents of the stomach being shaken about" should make the "food act as a foreign body"? Are not the contents of the stomachs of those persons who lead active lives daily "shaken about" in either their avocations or amusements? We do not hear of hard riders across country being specially liable to sickness of the stomach, nor is emesis, as far as I know, common in the hunting field, though I should say that the stomach recognises little difference in the motion conveyed to its contents in these cases from that which it experiences on board a large steamer in a heavy sea. Then if the nausea was due to the food acting as a foreign body, why should it not cease when the foreign body is effectually removed by vomiting, as its stay in the stomach can hardly have been long enough to have set up an irritation which would outlive its removal? It cannot have escaped Mr. Donnellan's notice that the remedy which he instances to prove his theory of "gastric irritation" (a mustard leaf or other counter-irritant) is often of similar value where the vomiting is due to cerebral causes. I do not venture to explain the cause of sea-sickness, but I do think from a fair experience of this complaint that its causes are more cerebral than gastric, and I certainly believe that the theory as to the disturbance of the circulation in the semicircular canals is as tenable as any yet advanced.

I am, Sirs, yours faithfully,

Stratford-on-Avon, Oct. 3rd, 1887. S. A. L. SWAN, M.D.

To the Editors of THE LANCET.

SIRS,—I was somewhat surprised to see Mr. Donnellan, in THE LANCET of Oct. 1st, upholding the antiquated theory of "shaking about of the contents of the stomach" as a cause of sea-sickness. He does not, however, make any attempt to explain how the motion of the vessel is communicated to these contents. Even if he had succeeded in this, that would not throw any light on the fact that sea-sickness is most common when the stomach is empty, and not at all uncommon in nervous people when sailing upon a smooth lake or river. We have definite proof of nervous apprehension being the initial factor. Now this will not produce "shaking about of the contents of the stomach," though I see no reason, arguing from analogy, why it should not cause an inefficiency of the pyloric sphincter. At any rate, if there be any mechanical derangement, this is as likely as anything else. With regard to the brain, probably there is first anæmia, then congestive hyperæmia produced by the vomiting, and in long voyages this is likely to be a more or less permanent cause for the incessant sickness.

I remain, Sirs, yours very truly,

October 4th, 1887. J. RUSSELL HARRIS, M.D.

THE PRESYSTOLIC MURMUR.

WE have received several letters on the subject raised by Dr. Dickinson in a paper now appearing in our columns. We reserve the publication of the communications until next week, when Dr. Dickinson's paper will have been completed.

M.S.—As the case is represented by our correspondent, we think he would not be justified in giving a certificate.

HOLIDAY AMENITIES.

Enquirens.—Our correspondent has three courses before him—either to appropriate the case, or to share the fee, or to hand over both the patient and the fee to the ordinary medical adviser. The last course is the kindest; but there would be nothing unreasonable in the second. We do not like the first. The fact that a man on his holiday has a partner who is not acceptable to his patients does not entitle him the less to the consideration of his professional neighbours.

De Lunatico Inquirendo.—1. Our correspondent may receive one idiot only into his house without a licence. The patient must be under order and two medical certificates, copies of which must be sent to the Commissioners in Lunacy.—2. There is no book to guide a practitioner intending to start an idiot asylum. A licence for such an institution would probably only be granted to an applicant who had had some experience in the treatment of insanity and diseases of children; and not then unless it could be shown that there was need for such an institution in any particular district. The new Bill awaiting enactment proposes to make legal the admission of an idiot to an asylum under one certificate.

Dum Spiro Spero is referred to an article in the Students' Number of THE LANCET, published on Sept. 3rd last.

THE "DOECKER" PORTABLE HOSPITAL.

To the Editors of THE LANCET.

SIRS,—As sole agents for Doecker's Patent Portable Houses, and after communicating with the manufacturers, we take the liberty to call your attention to the unfairness you have allowed to creep into an article entitled, "Ducker Portable Hospital," in your issue of the 17th ult. We are sure that you cannot have been aware how misleading the article in question is to the public, and we feel equally confident that you will do us justice by publishing the following remarks.

It was Doecker's (not Ducker) Patent Portable Houses that obtained the prize at the international competition for ambulance barracks which took place at Antwerp in September, 1885, under the auspices of the Red Cross Society of Geneva, the prize consisting of a gold medal and £200 offered by the Empress of Germany, a gold medal having previously been awarded to the Doecker Hospital Huts at the Hygienic Exhibition in Berlin, 1883, and presented by H.I.M. the Empress Augusta to Captain de Doecker. We do not wish to enumerate the awards the Doecker Patent Portable Houses have obtained; suffice it to say that they have taken the highest prizes wherever they have been in competition, and that the imitations which have sprung up are sufficient proof in themselves of the superiority of the original Doecker Hospital Huts. The Ducker Portable Hospital, described in the article referred to, is a close imitation of the original Doecker Patent Portable Houses; but the amount of air-space has been curtailed. Taking the latter into consideration, an original Doecker Portable Hospital for the same number of beds will be about 5 per cent. cheaper than its imitation. The agents of the company making the Ducker Hospitals have tried all means to drive Doecker's Patent Portable Houses out of Berlin and Paris without result, and they are evidently anxious to make a similar attempt here. We enclose full particulars of Doecker's Patent Portable Houses, also copy of a letter from a hospital authority to Mr. Trier, the latter formerly the representative of the manufacturers in London, and apologising for thus far trespassing upon your valuable space,

We are, Sirs, yours very truly
(*pro* Banner Sanitation Co.),
A. B. HUBERT, Manager.

Northumberland-avenue, W.C., Oct. 1st, 1887.

HOSPITAL APPOINTMENTS IN BUENOS AYRES.

To the Editors of THE LANCET.

SIRS,—The post of house-surgeon to the British Hospital at Buenos Ayres was advertised in THE LANCET a few weeks ago as being vacant. Applications were to be sent to a firm in London (acting as agents) on or before September 30th. I sent in my application on September 23rd, and it was returned, the agents saying that they had received directions (not from the committee of the hospital) to do so, as so many applications had been sent in. I had taken a good deal of trouble about the appointment, and as I have some very influential friends in Buenos Ayres I thought I stood a good chance of getting it. I think that the application should have been submitted to the committee of the hospital. I should be obliged if you would publish this.

I am, Sirs, yours faithfully,
Sept. 30th, 1887. M. C. M.

*** We have received another letter to the same effect.—ED. L.

A QUERY.

To the Editors of THE LANCET.

SIRS,—I have a patient, an interesting lad of eight, the son of a collier, who two years ago had a very severe attack of scarlatina, and, as the result, lost both eyes and became completely deaf. He has now forgotten most of the words he knew; but in all other respects he is a strong, healthy boy. I shall be exceedingly thankful to any reader of THE LANCET who could inform me whether there exists in this country any institution where this boy, who is absolutely deaf and blind, could be received and taught. I am, Sirs, your obedient servant,

Oct. 5th, 1887. B.

HOLIDAY COLONIES.

THE movement for sending poor children from large towns into the country or to the seaside during the holidays in "colonies" is making considerable progress in France. The society established by M. Gréard has provided for 600 Paris children, and this year a small "colony" has been taken from Bayonne to Saint Jean de Luz for three weeks with excellent results. According to M. Delvaille of Bayonne, the average increase in weight was 1·039 kilog., in height 6 millim., and in chest measurement 12 millim. Under ordinary circumstances the increase in weight would have been only 250 grms. M. Delvaille points out that it is during the holidays that the children are most subject to all the evil and unhygienic influences of their homes, which are he thinks much more serious hindrances to their health than even intellectual overwork.

In doubt.—1. No; the consolidated pay is supposed to cover hotel and travelling expenses. Of course, a medical officer travelling in India on duty obtains a railway warrant from Government.—2. Medical officers of the Indian Medical Service are supposed to do duty with the native troops when on military service. A considerable proportion of medical officers are engaged after a time on civil duties.

THE NAVAL MEDICAL SERVICE.

To the Editors of THE LANCET.

SIRS,—If a naval executive officer wishes to refresh his memory and keep himself in touch with the various improvements, alterations, &c. in the subjects of gunnery or torpedo practice and theory, he may, with the approval of the Admiralty, pass through a short course on board one of the ships established for the purpose. Now, a naval medical officer has no such facilities afforded to him in his special branch; and, as a rule, however anxious he may be to keep up with the times, he is absolutely unable to do so. A surgeon may be appointed to a naval hospital for fifteen or eighteen months after serving two commissions of three years and a half to four years each in some out-of-the-way parts of the world, during which time his practice has been of the scantiest description, usually one type of disease prevailing. He is then called upon to treat a hundred or two hundred cases of general medical and surgical diseases or injuries, after almost a blank, as far as his profession is concerned, of seven or eight years. Of course, he may endeavour to keep up his knowledge by reading the medical journals and new works; but reading without the chance of applying the principles taught is at best a thankless task. What I would suggest is that a surgeon should be allowed, if he desire it, to attend a London hospital or other recognised medical school for a short period, say, three or six months, at any time after he has served six years. The time so spent to count as full-pay time, on the condition that as soon as convenient after its expiration the medical officer should pass an examination which should prove that the time so spent had been to the benefit of the service. If he fail to pass, the time should be counted as half-pay. I feel confident that this suggestion (perhaps modified in several ways), if acted upon, would prove a great boon to those medical officers of the navy who do not wish to degenerate into mere machines of routine, and who really desire to do their duty efficiently to the service and their country.

I am, Sirs, yours truly,
Oct. 2nd, 1887. SURGEON, R.N.

HERPES AND VACCINATION.

To the Editors of THE LANCET.

SIRS,—If the following case be deemed of sufficient interest, I should be glad if you would insert it in THE LANCET.

C. F——, aged nine years, came to me early in September suffering from herpes costalis, which I treated with hot bathing and zinc ointment, and which was quite cured by Sept. 9th. On the 13th I revaccinated him, and on examining the arm on the 20th inst. I found there was a distinct and typical crop of herpes surrounding the arm for about three inches above and the same distance below the vaccine vesicles. It would appear that the irritation of the vaccination had brought out this fresh crop; and though only in the immediate vicinity of the vesicles these latter were quite ordinary, seeming not to be in the least degree altered by the herpes. I am, Sirs, yours faithfully,

Montague-place, B., Sept. 30th, 1887. CHAS. J. THOMPSON, M.R.C.S.

A NEW METHOD OF VENTILATION.

A CORRESPONDENT asks for the address of Messrs. Young and Moss, which we have unfortunately mislaid.

ERRATUM.—In line 15 of Dr. Peter Hood's letter, published last week, page 682, for "the oyster preparation of the London Pharmacopœia" read "*creta* preparata of the London Pharmacopœia."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Suckling, Birmingham; Dr. Cox, London; Mr. Wells, Nottingham; Dr. Hugh Thomson, Glasgow; Dr. F. A. A. Smith, Cheltenham; Dr. Owen Travis, Crewe; Mr. Luff, London; Mr. S. Paget, London; Dr. J. C. Renton, Glasgow; Mr. Forshaw, Bradford; Miss Docwra; Mr. C. W. Catheart, Edinburgh; Mr. P. Kent, Bromley; Mr. H. W. Freeman,

Bath; Sir T. Longmore, Netley; Mr. G. Steell, Manchester; Mr. F. C. Turner, London; Mr. F. Treves, London; Dr. J. Weaver, Southport; Mr. S. Lee, Barking; Dr. Russell Harris; Mr. J. M. Shâh, Junagadh State; Mr. H. Webb; Dr. J. Harley, London; Messrs. Warren and Co., Bristol; Mr. Borham, Fulham; Dr. W. Squire; Mr. Anderson Critchett, London; Mr. S. R. Lovett, London; Mr. Nestfield, Old Trafford; Mr. J. Clark, Edinburgh; Mr. Dent; Messrs. Robertson and Scott, Edinburgh; Dr. R. P. Harris, Philadelphia; Dr. Coode Adams, Hampstead; Dr. Hutchinson, Scarborough; Messrs. Parkins and Gotto, London; Mr. Poynter, London; Messrs. Glendenning and Co., London; Dr. Stricker, Frankfort; Mr. Feeny, London; Dr. Fly Smith, London; Dr. Swan, Stratford-on-Avon; Messrs. Allen and Hanburys, London; Mr. A. E. Hubert, London; Messrs. Wertheimer and Co., London; Dr. J. L. Steven, Glasgow; Mr. C. Ford, Hong Kong; Mr. Stannard, London; Dr. J. Oliver, London; Mr. Radcliffe Crocker, London; Mr. J. Milner, Hayes; Dr. Hassall; Mr. Hurry Fenwick, London; Mr. W. H. Kesteven, London; Dr. Samuel Sloan, Glasgow; Mr J. H. Walters, Reading; Mr. J. Weaver; Dr. Ogier Ward, Tottenham; Mr. Groves, Dorchester; Dr. Coghill; Dr. Mark Long, Ludlow; Mr. J. M. Richards, London; Dr. Watson, Bournemouth; Mr. Aveling, Chelsea; Mr. Hilliard, Aylesbury; Mr. Durant, London; Mr. Bigg, London; Mr. Latty, Kensington; Mr. Mashen, Sandown; Mr. Clarke, London; Mr. Collins, London; Mr. Barrett, Chichester; Mr. Briggs, Cambridge; Mr. Hine, Caine; Mr. Randall, Windsor; Mr. Smith, Stafford; Dr. Stanley, Edinburgh; Mr. Gibbs, Rotherham; Dr. Muirhead, Edinburgh; Mr. Parnell, Bournemouth; Mr. St. Dalmas, Leicester; Mr. M. Morris, London; Mr. Dransfield, Penistone; Mr. Harness, London; Mr. Culleton, London; Mr. Oldham, Monsol; Dr. Phillips, Bilbao; Mr. Elliot, Carlisle; Messrs. Austin and Son, Clifton; Mr. Leikershafen, Homburg; Messrs. Christy and Co., London; Mr. Hope, London; Mr. Hulme; Mr. Labban, West Bromwich; Mr. Scott, Manchester; Mr. Man, Bradford; Messrs. Epps and Sons, Leeds; Messrs. Dingwall, Boston; Messrs. Keith and Co., Edinburgh; Miss Nicholay; Mr. Robinson; Mr. Hall, South Shields; Mr. W. A. Frost, London; Mr. Bennett, Liverpool; Bones; M. C. M.; M. S.; A. B., Derby; C. S.; Nitro-glycerine; De Lunatico Inquirendo; A. B. C., Notting-hill; Medicus, Nottingham; Surgeon, R.N.; X.; Seaside; A Medical Muser; X. Y. Z.; B.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Norman Kerr, London; Mr. J. Dickinson, London; Messrs. Reynolds and Co., Leeds; Mrs. Powne, Chard; Mr. Blair, Leeds; Messrs. Pocock and Co., London; Mr. Greenwood, Liverpool; Mr. Birchall, Liverpool; Mr. Paine, Worthing; Mr. Lyons, Worcester; Mr. Gayley, Tipperary; Mr. Webb, Bury; Mr. Mawson, Bradford; Mr. MacIntyre, Consett; Dr. Knowles, London; Dr. Knowles, Barnsley; Dr. Dawson, Bournemouth; Mr. Fletcher, Northwich; Mr. Dixon, Northampton; Mr. Hornibrook, London; Dr. Godson, Folkestone; Mr. Davis, Worcester; Mr. Spencer, Barnes; Dr. Phin, London; Messrs. Bush and Co., London; Dr. Winslow, London; Mr. Webster, Shepherd's Bush; Mr. Hazel, London; Mr. Reed, Sutherland; Mr. Stenhouse, Glasgow; Mr. Jones, Boddern; Mr. Brown, Tredegar; Mr. Collins, Kirkham; Dr. Padley, Swansea; Mr. George, Oxford; Mr. Hoop, Ravensbourne; Mr. Greenhalgh, Bury; Miss Forrest, Nottingham; Deaconess Townson, Chester; M. N. P. Q.; H. F., Barnstaple; W.; Fellow; L.R.C.P., Tredegar; Spes; B. M. A.; P. H.; C. J.; C. H., Cranleigh; T.; M.B., Stourbridge; Medicus, Bristol; Neurosis, Birmingham; G. J. A., Sheffield; W. S., Keighley; M. N., Camdentown; S. C.; G. B., Kingussie; S. H., Dublin; F. A. A.; W. T., West Brighton; Clavicle, Liverpool; Medicus, London; M.B.; Forceps, Hyde; Dr. W., Darwen; Perdrix; Medicus, Northampton.

Educational Times, Westerham Herald, Warehousemen and Drapers' Trade Journal, Washington Evening Star, Illustrated Sydney News, Women's Suffrage Journal, Horticultural Times, &c., have been received.

Medical Diary for the ensuing Week.

Monday, October 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

Tuesday, October 11.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 3.30 P.M.; Saturday, 3.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.
THE PARKES MUSEUM OF HYGIENE.—8 P.M. Mr. J. Gordon: Scavenging, Disposal of Refuse and Sewage.

Wednesday, October 12.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.
HUNTERIAN SOCIETY.—8 P.M. Dr. J. Braxton Hicks: (1) On the Intermittent Contraction of the Uterus in Pregnancy as a Means of Diagnosis. (2) A case of Inversio Uteri.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. P. H. Gosse: Twenty-four New Species of Rotifera.—Mr. C. R. Beaumont: Observations on the Metamorphoses of Amœbæ and Actinophrys.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M.—Specimens will be shown by Dr. Granville Bantock, Mr. Lawson Tait, Dr. Robert Barnes, Dr. Mansell Moullin and others. Dr. J. St. Clair Boyd: Pseudo-Hydramnios.

Thursday, October 13.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, October 14.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
THE PARKES MUSEUM OF HYGIENE.—8 P.M. Prof. W. H. Corfield: Sanitary Appliances.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Handford: Pemphigus, Peculiar Affection of the Cicatrices, Arsenical Pigmentation, with Case.—Dr. Lediard: Case of Recovery from Bullet Wound of the Liver.—Sir Dyce Duckworth: A case of Pulmonary Arterial Reflux.—Mr. Treves: Case of Cephalhæmatoma, with extensive Ossification of the Cyst Wall.

Saturday, October 15.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year ..... £1 12 6 | Six Months..... £0 16 3
TO CHINA AND INDIA.....One Year 1 16 10
TO THE CONTINENT, COLONIES, AND UNITED STATES ..... Ditto 1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications (seven lines and under)... ...	£0	5	0
Official and General Announcements	0	5	0
Trade and Miscellaneous Advertisements	0	4	6
Every additional Line	0	0	4
Front Page... ... ... per Line	0	1	0
Quarter Page	1	10	0
Half a Page	2	15	0
An entire Page	5	5	0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.